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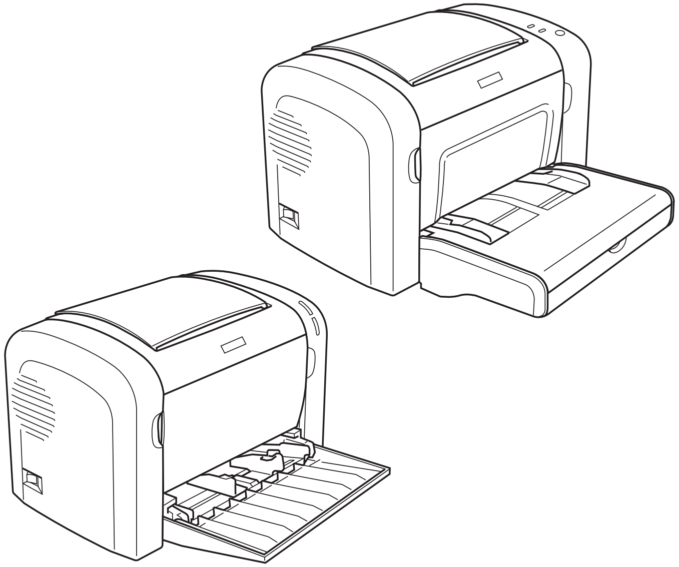

A4 Monochrome Page Printer

EPSON EPL-6200/EPL-6200L

EPSON

SEPG03002

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Imaging & Information Product Division
TPCS Quality Assurance Department

PRECAUTIONS

Precautionary notations throughout the text are categorized relative to 1)Personal injury and 2) damage to equipment.

DANGER	Signals a precaution which, if ignored, could result in serious or fatal personal injury. Great caution should be exercised in performing procedures preceded by DANGER Headings.
WARNING	Signals a precaution which, if ignored, could result in damage to equipment.

The precautionary measures itemized below should always be observed when performing repair/maintenance procedures.

DANGER

1. ALWAYS DISCONNECT THE PRODUCT FROM THE POWER SOURCE AND PERIPHERAL DEVICES PERFORMING ANY MAINTENANCE OR REPAIR PROCEDURES.
2. NO WORK SHOULD BE PERFORMED ON THE UNIT BY PERSONS UNFAMILIAR WITH BASIC SAFETY MEASURES AS DICTATED FOR ALL ELECTRONICS TECHNICIANS IN THEIR LINE OF WORK.
3. WHEN PERFORMING TESTING AS DICTATED WITHIN THIS MANUAL, DO NOT CONNECT THE UNIT TO A POWER SOURCE UNTIL INSTRUCTED TO DO SO. WHEN THE POWER SUPPLY CABLE MUST BE CONNECTED, USE EXTREME CAUTION IN WORKING ON POWER SUPPLY AND OTHER ELECTRONIC COMPONENTS.
4. WHEN DISASSEMBLING OR ASSEMBLING A PRODUCT, MAKE SURE TO WEAR GLOVES TO AVOID INJURIER FROM METAL PARTS WITH SHARP EDGES.

WARNING

1. REPAIRS ON EPSON PRODUCT SHOULD BE PERFORMED ONLY BY AN EPSON CERTIFIED REPAIR TECHNICIAN.
2. MAKE CERTAIN THAT THE SOURCE VOLTAGES IS THE SAME AS THE RATED VOLTAGE, LISTED ON THE SERIAL NUMBER/RATING PLATE. IF THE EPSON PRODUCT HAS A PRIMARY AC RATING DIFFERENT FROM AVAILABLE POWER SOURCE, DO NOT CONNECT IT TO THE POWER SOURCE.
3. ALWAYS VERIFY THAT THE EPSON PRODUCT HAS BEEN DISCONNECTED FROM THE POWER SOURCE BEFORE REMOVING OR REPLACING PRINTED CIRCUIT BOARDS AND/OR INDIVIDUAL CHIPS.
4. IN ORDER TO PROTECT SENSITIVE MICROPROCESSORS AND CIRCUITRY, USE STATIC DISCHARGE EQUIPMENT, SUCH AS ANTI-STATIC WRIST STRAPS, WHEN ACCESSING INTERNAL COMPONENTS.
5. DO NOT REPLACE IMPERFECTLY FUNCTIONING COMPONENTS WITH COMPONENTS WHICH ARE NOT MANUFACTURED BY EPSON. IF SECOND SOURCE IC OR OTHER COMPONENTS WHICH HAVE NOT BEEN APPROVED ARE USED, THEY COULD CAUSE DAMAGE TO THE EPSON PRODUCT, OR COULD VOID THE WARRANTY OFFERED BY EPSON.

About This Manual

This manual describes basic functions, theory of electrical and mechanical operations, maintenance and repair procedures of the printer. The instructions and procedures included herein are intended for the experienced repair technicians, and attention should be given to the precautions on the preceding page.

Manual Configuration

This manual consists of six chapters and Appendix.

CHAPTER 1.PRODUCT DESCRIPTIONS
Provides a general overview and specifications of the product.

CHAPTER 2.OPERATING PRINCIPLES
Describes the theory of electrical and mechanical operations of the product.

CHAPTER 3.TROUBLESHOOTING
Describes the step-by-step procedures for the troubleshooting.

CHAPTER 4.DISASSEMBLY / ASSEMBLY
Describes the step-by-step procedures for disassembling and assembling the product.

CHAPTER 5.ADJUSTMENT
Provides Epson-approved methods for adjustment.

CHAPTER 6.MAINTENANCE
Provides preventive maintenance procedures and the lists of Epson-approved lubricants and adhesives required for servicing the product.

APPENDIX Provides the following additional information for reference:

- Connector pin assignments
- Electric circuit boards components layout
- Electrical circuit boards schematics
- Exploded diagram & Parts List

Symbols Used in this Manual

Various symbols are used throughout this manual either to provide additional information on a specific topic or to warn of possible danger present during a procedure or an action. Be aware of all symbols when they are used, and always read NOTE, CAUTION, or WARNING messages.

ADJUSTMENT REQUIRED	Indicates an operating or maintenance procedure, practice or condition that is necessary to keep the product's quality.
CAUTION !	Indicates an operating or maintenance procedure, practice, or condition that, if not strictly observed, could result in damage to, or destruction of, equipment.
CHECK POINT ✓	May indicate an operating or maintenance procedure, practice or condition that is necessary to accomplish a task efficiently. It may also provide additional information that is related to a specific subject, or comment on the results achieved through a previous action.
WARNING	Indicates an operating or maintenance procedure, practice or condition that, if not strictly observed, could result in injury or loss of life.

Safety Precautions

To prevent accidents during a maintenance procedure, strictly observe the Warnings and Cautions and never depart from the instructions given in this document. Do not do anything that is dangerous even if not specifically described in this manual.
In work operations, always take great care to ensure safety in consideration of not only the precautions described below but also general safety precautions.

Laser Safety

This printer is digital equipment qualified as a Class 1 laser product.

You will not be exposed to the danger of a laser beam as long as you observe strictly the precautions given in this manual.

WARNING

- **Be sure to wear a laser protection goggle that meets the applied specifications, whenever necessary.**
- **Be sure to turn off the power to the printer beforehand when you start work around the print head or on the laser beam path around the Photoconductor Unit or the like.**
- **If you need to keep the power to the printer turned on for required work operations, take off the watch and finger ring, if you wear, and wear a proper laser protection goggle.**
- **It is dangerous to put any high-reflectivity tool in the laser beam path. Especially, pay attention to the handling of tools on the user site.**
- **For the print head, there is no disassembly or adjustment items on the user site. If the print head is found defective, replace the assembly or unit containing the control board with a new one. That is, do not remove the laser diode in a single unit and do not make trimmer adjustment of the control board.**

Internal Laser Radiation

Semiconductor Laser Specifications	
Laser diode maximum output	15 mw
Maximum average emission power	36.903 μw (Laser emission opening in the Print Head)
Wavelength	770 ~ 800 nm

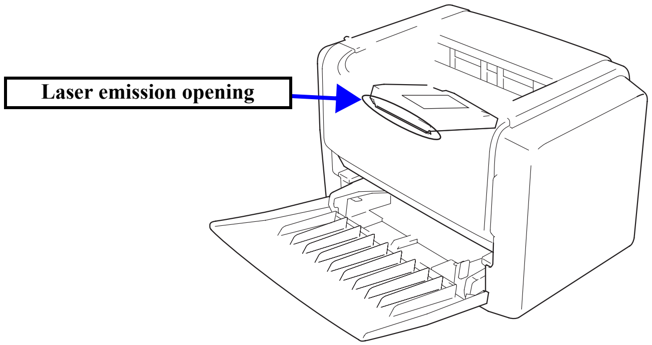
☐ This printer incorporates a Class 3b laser diode, which emits an invisible laser beam.

☐ The Print Head Assembly incorporates this laser diode and a polygon mirror.

☐ The Print Head Assembly is not included in the on-the-market maintenance adjustment items. Therefore, never disassemble or adjust the Print Head Assembly under any circumstances.

WARNING

Disassembly or adjustment by any procedure other than prescribed here can result in exposure to an dangerous laser beam.



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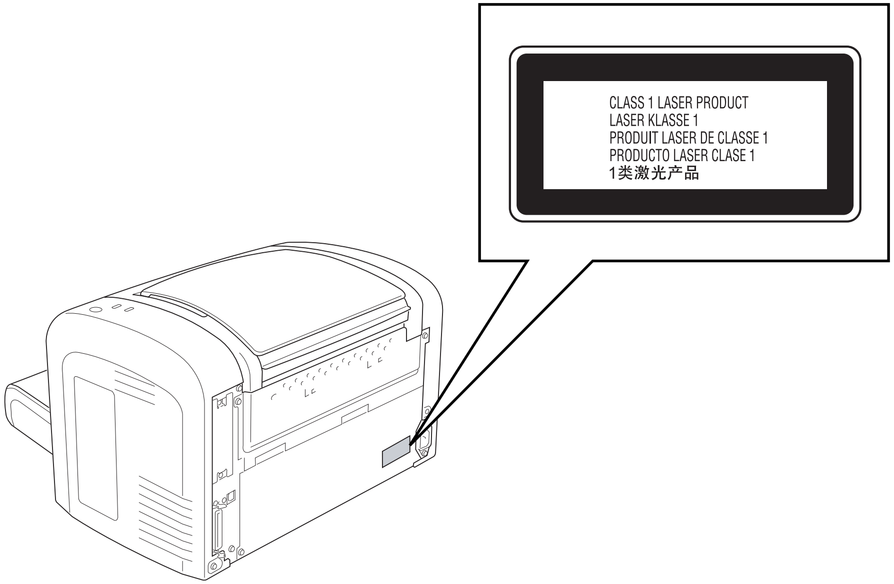
Laser Safety and Caution Labels

Warning labels and caution labels are affixed to this printer for accident prevention.

CHECK POINT

In maintenance work, check that the labels are free from peeling and soiling.

- ☐ Laser safety label
  As shown below, a laser safety label is stuck on the rear panel of the printer beside the AC inlet.



CLASS 1 LASER PRODUCT
LASER KLASSE 1
PRODUIT LASER DE CLASSE 1
PRODUCTO LASER CLASE 1
1类激光产品

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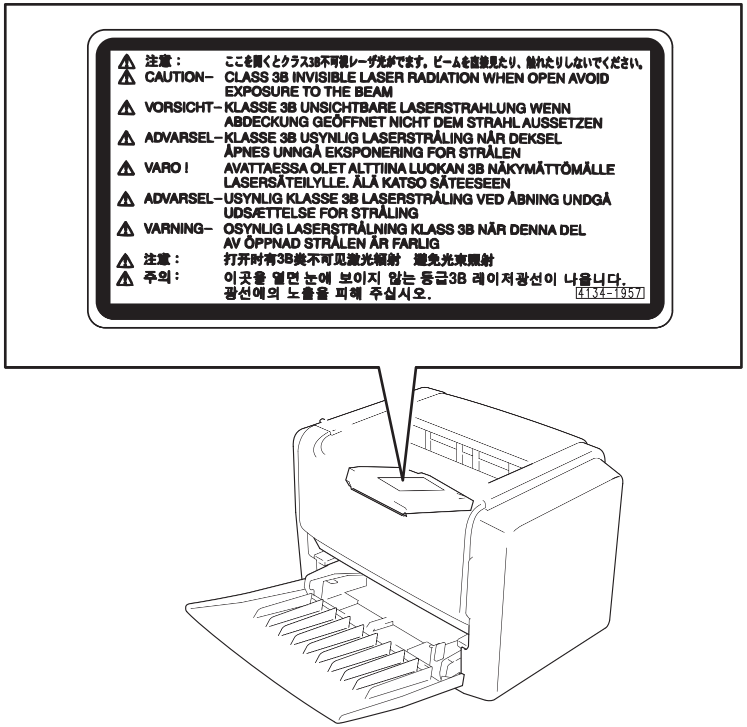
- ☐ Laser caution label
  As shown below, a laser caution label is stuck on the inside of the printer.



⚠ 注意： ここを開くとクラス3B不可視レーザ光がでます。ビームを直接見たり、触れたりしないでください。
⚠ CAUTION– CLASS 3B INVISIBLE LASER RADIATION WHEN OPEN AVOID EXPOSURE TO THE BEAM
⚠ VORSICHT– KLASSE 3B UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET NICHT DEM STRAHL AUSSETZEN
⚠ ADVARSEL– KLASSE 3B USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES UNNGÅ EKSPONERING FOR STRÅLEN
⚠ VARO ! AVATTAESSA OLET ALTTIINA LUOKAN 3B NÄKYMÄTTÖMÄLLE LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN
⚠ ADVARSEL– USYNLIG KLASSE 3B LASERSTRÅLING VED ÅBNING UNDGÅ UDSÆTTELSE FOR STRÅLING
⚠ VARNING– OSYNLIG LASERSTRÅLNING KLASS 3B NÄR DENNA DEL AV ÖPPNAD STRÅLEN ÄR FARLIG
⚠ 注意： 打开时有3B类不可见激光辐射 避免光束照射
⚠ 주의： 이곳을 열면 눈에 보이지 않는 등급3B 레이저광선이 나옵니다. 광선에의 노출을 피해 주십시오.
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Revision Status

Revision	Date of Issue	Description
A	September 5, 2003	First release

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CHAPTER

1

PRODUCT DESCRIPTION

1.1 Outline

EPSON EPL-6200 and EPSON EPL-6200L are non-impact page printer with semiconductor laser and electrophotographic technology.

1.1.1 Features

ENGINE FEATURES

☐ A compact and lightweight A4 engine.

☐ High resolution and high printing speed.
See table below.

Table 1-1. Resolution and Printing Speed

Model	Resolution	Printing Speed
EPL-6200	300 dpi / 600 dpi	20 ppm
	1200 dpi	10 ppm
EPL-6200L	600 dpi	20 ppm

Note : The engine itself supports True 1200 dpi, but 1200 dpi is not supported with EPL-6200L.

☐ With EPL-6200, the standard paper supply consists of the cassette-like universal paper tray (250 sheets) and manual feed tray (one sheet).
EPL-6200 supports an optional 500-sheet lower cassette (A4 size).
EPL-6200L is equipped with a 150-sheet paper feed tray.

☐ EPL-6200 supports an optional Duplex Unit (requiring paper loading from the lower cassette).

☐ Developer Cartridge (toner cartridge)

- New type Developer Cartridge (removal and installation together with the OPC drum)
- CSIC (It detects Toner capacity and brand-new toner automatically.)

CAUTION !

There is no interchangeability between the Developer Cartridges for EPL-6200/EPL-6200L and those for the previous models “EPL-6100 / EPL-6100L”.

- Toner life

Table 1-2. Toner Life

Model	Initial	Replacement	
EPL-6200	3000 pages	3000 pages	6000 pages
EPL-6200L	1500 pages	3000 pages	

☐ Photoconductor Unit
The Photoconductor Unit can be assembled with the Developer Cartridge (toner cartridge) into a single unit.

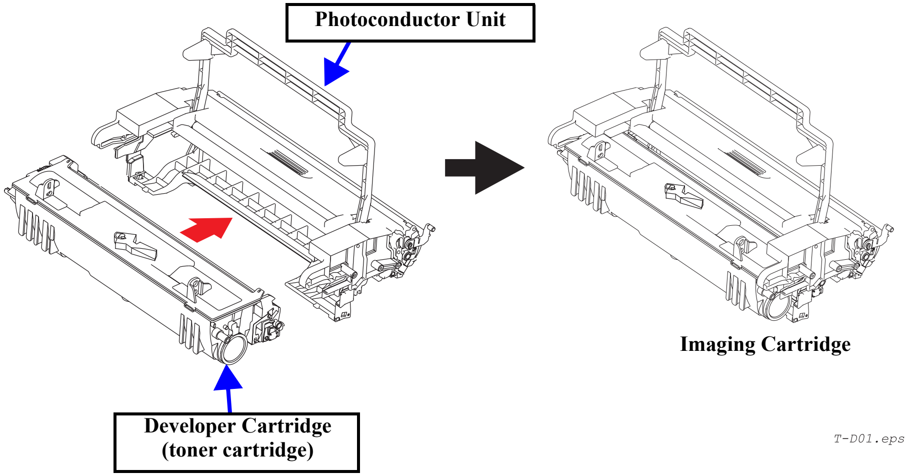


Figure 1-1. Imaging Cartridge Constitution

CONTROLLER FEATURES

<EPL-6200>

☐ High-speed controller

- ■ CPU : TMPR4955BFG 200 MHz (Same as for EPL-N2500)
- ■ RAM : 8 MB fitted as standard RAM and Expandable up to 136 MB Max.
  Exclusive RAM DIMM for EPSON (Same as for EPL-6100)

☐ Equipped with one Type B interface slot (Level 3 supported)

☐ Two standard interfaces

- ■ IEEE1284 parallel interface
- ■ USB interface

☐ Real 1200dpi supported
(Only in ESC/Page, PCL6, PostScript 3. Up to 600 dpi supported in other modes)

NOTE: *1200 dpi printing needs much memory. At 1200 dpi printing, therefore, the possibility of running short of memory is high with standard memory.*
Recommendation: Extension of 16 MB or more.

☐ EnhancedMicroGray installed (available only in 600 dpi and 300 dpi. Automatically switched off when 1200 dpi is selected.)

☐ RITech installed (available only in 600 dpi and 300 dpi. Automatically switched off when 1200 dpi is selected.)

☐ PCL6 emulation is installed as a standard feature.

☐ Adobe PostScript3 is installed as a standard feature.

☐ No optional ROM DIMM slot.

<EPL-6200L>

☐ Host-based controller

- ■ CPU : EPSON 32 bit RISC S1C33000 48 MHz
- ■ RAM : Standard RAM is 2 MB
  RAM can be not expanded.

☐ Two standard interfaces

- ■ IEEE1284 compatible parallel interface supporting ECP.
- ■ USB interface (USB revision 1.1, supporting USB ID).

☐ Data compression technology

- ■ Sending compressed data from a host computer allows printing most of the data with only standard memory.
- ■ An expanded circuit hardware provides high-speed processing.

☐ No toner save mode

☐ No 300 dpi mode

☐ No RITech or PGI (EnhancedMicroGray)

SOFTWARE FEATURE (ONLY WITH EPL-6200)

☐ Printer status and printer environment are monitored by bidirectional EJL and ESC/Page.

☐ The following modes and resolution are supported.

Table 1-3. Supported Modes

	1200dpi	600dpi	300dpi	Note
ESC/Page	○	○	○	
PCLXL	○	○	○	
PCL5e	X	○	○	
ESC/P2	X	○	○	
FX	X	○	○	
I239X	X	○	○	
PostScript3	○	○	○	

☐ NLSP is included in the main unit font ROM

☐ Compatible with USB Revision 1.1

☐ Job cancellation by panel switch

☐ Mechanical Controller update function (effective only when Mechanical Controller is Flash)

☐ Firmware update function (effective only when Program ROM is Flash) (crb format files (rcc format files supported with RAM expanded to 32 MB))

☐ Job MIB supported

☐ Firmware operation area

Table 1-4. Firmware Operation Area

Expanded RAM	Module	
	Other than PS3	PS3
Less than 32 MB	ROM	ROM
32 MB	RAM	ROM
64 MB or more	RAM	RAM

OTHER FEATURE (ONLY WITH EPL-6200L)

☐ Toner save image is made by Printer Driver.

☐ Physical engine offset setting function (It is set by printer driver)

☐ Printer sharing (Printer driver's function)

1.1.2 Differences between Models

1.1.2.1 “EPL-6200” Differences from EPL-6100

Table 1-5. “EPL-6200” Differences from EPL-6100

Item	EPL-6200	EPL-6100	Note
Engine speed	20 ppm	16 ppm	
Face up tray (Option)	Not available	Available	
Optional DIMM slot	Provided	Provided	
Duplex Unit	Optional	Not available	Related SelecType and errors added
Developer Cartridge part number	New type		Not interchangeable
OPC drum	New type		Not interchangeable
Toner CSIC	Provided	Not provided	Related errors added
Font vendor	AGFA	Bitstream	
PS3	Standard	Optional	
MIB	JOB MIB	SystemWalker MIB	
Toner counter / OPC drum life level indication	7 steps	5 steps	
Rendezvous=On,Off	Provided	Not provided	AUX I/F Menu
Manual Feed mode	1st Page, EachPage added	On only	
Symbolset	Added (LJ4, ESCP2)		
High humidity setting	Setting by driver	Jumper setting	Added to EJL
Physical offset setting	Available (Setting by driver)	Not available	
Feed Regist adjustment	Available	Not available	
Jam error	Composite error	Priority order	
Cover Open error	Composite error	Priority order	
Consumables warning	Composite warning	Priority order	
Engine program ROM update function	Available	Not available	Effective only when Mechanical Controller is flash
Program operation area	ROM (RAM depending on RAM capacity)	Always RAM	

1.1.2.2 “EPL-6200L” Differences from EPL-6100L

- ☐ Printing speed is 20 ppm (EPL-6100L: 16 ppm)
- ☐ CSIC with Developer Cartridge (toner cartridge)
- ☐ The ECP/Nibble switch jumper is disused.
- ☐ The High humidity/Normal humidity switch jumper is disused. (The setting is enable by printer driver)
- ☐ Engine offset adjustment (It is adjusted by printer driver)
- ☐ Registration position (paper feed direction) adjustment function (It is set at factory only.)

1.1.2.3 Differences between EPL-6200 and EPL-6200L

Table 1-6. Differences between EPL-6200 and EPL-6200L

Item	EPL-6200	EPL-6200L
Font, Program	16 MB Mounted	Not mounted
Emulation	Mounted PCLXL, PCL5e, GL/2, FX, ESCP2, I239X, ESC/Page, PostScript 3	Not mounted (No option)
Resolution	300 / 600 / 1200 dpi	600 dpi
Expansion RAM	SD RAM DIMM	None
Network	Supported with a Type B slot	Direct connection not supported Shared Printer is supported on Windows, but not supported on Macintosh
Standard paper feeder	Universal paper tray (250 sheets)	Folding tray type (150 sheets)
Optional unit	Lower paper cassette available (Only one stage)	Lower paper cassette not available
Control Panel	3 switches and 6 LEDs	No switches and 2 LEDs
Toner save mode	Mounted	Not mounted (Available by printer driver)

1.1.3 Other (Only with EPL-6200L)

1.1.3.1 Restrictions on Use of EPL-6200L

- The printer itself cannot print the Status Sheet.
- When the printer is connected to a parallel interface, printing via devices such as a printer switch, LAN-Parallel converter, or USB-Parallel converter is not guaranteed.
  → Direct connection to a printer port of the host computer with an ECP supporting cable is premised. Using a converter for a USB connection is not guaranteed.
- This printer cannot be used in environments where a bi-directional port is not supported, for example, where a terminal server is used.

1.1.3.2 Operating System

Table 1-7. Operating System

OS	Version
Windows	Windows 95/98/Me/XP/2000, NT 4.0
Macintosh	Mac OS 8.6 or later, 9.x, 10.1.2 or later only

CHECK POINT

- **Other systems such as DOS, Unix, Linux are not supported.**
- **Only personal computers operating on Macintosh or Windows equipped with a USB port as standard can be used.**

NOTE: *For details, see "1.8 System Requirements (Only for EPL-6200L) (p.57)".*

1.2 Basic Specifications

1.2.1 Process Specifications

☐ Printer Type
Semi-conductor laser beam scan and dry single-component non-electromagnetic toner electrophotography

☐ Light Source
Semi-conductor laser

☐ Photoconductor Unit
OPC (organic photoconductor) drum

☐ Charging
Rotary-brush charging method

☐ Development
Exposed area development

☐ Toner
One-component non-magnetic toner

☐ Transfer
Roller transfer method

☐ Fixing
Heated roller method

☐ Density Adjustment
Variable development bias method (adjustable by user)

1.2.2 Printer Basic Specifications

☐ Resolution:

Table 1-8. Resolution

Model	Resolution	Note
EPL-6200	600 dpi/1200dpi	1200 dpi is by half speed control
EPL-6200L	600 dpi	

☐ Warming Up Time:

■ 21 or less seconds...... Time from power-on to “Ready” display
■ 16 or less seconds...... Time from low power consumption mode to “Ready” display
(23°C environment, at rated voltage)

☐ First Printing Time:

Table 1-9. First Printing Time (Unit: seconds max.)

Paper Size	EPL-6200						EPL-6200L
	600 dpi			1200 dpi			600 dpi
	Main Unit	Lower Cassette Unit	Duplex Printing	Main Unit	Lower Cassette Unit	Duplex Printing	Main Unit
A4	13	16	24	22	24	37	13
LGL	14	-	-	24	-	-	14
LT	13	16	24	22	-	37	13
B5	13	-	24	22	-	37	13
A5	12	-	-	21	-	-	12

☐ Continuous Printing Speed:

Printing speed mode

- Normal paper mode: Printing is performed at the highest speed available with the main unit. (Labels and transparencies are included)
- Thick paper mode: Printing is performed with the paper feed interval extended in order to maintain the print quality of Thick Papers. (“ppm down” may take place.) (Since the paper feed interval of envelopes or Japanese postcards is the maximum, there is no “ppm down”.)

- Normal paper (including labels and transparencies)

Table 1-10. Continuous Printing Speed with Plain Paper (Unit: ppm or more)

Paper Size	EPL-6200						EPL-6200L
	Simplex		Duplex				Simplex
	600 dpi	1200 dpi	600 dpi		1200 dpi		600 dpi
			1-sheet circulation	2-sheet circulation	1-sheet circulation	2-sheet circulation	
A4	20.0	10.0	10.4	13.5	5.2	6.7	20.0
LGL	16.0	8.0	-	-	-	-	16.0
LT	20.0	10.0	10.4	13.5	5.2	6.7	20.0
B5	20.0	10.0	10.4	13.5	5.2	6.7	20.0
A5	20.0	10.0	-	-	-	-	20.0
EXE	20.0	10.0	-	-	-	-	20.0
HLT	20.0	10.0	-	-	-	-	20.0

Note : The continuous printing speeds indicated above are common to all the paper feeders.

- Thick paper

Table 1-11. Continuous Printing Speed with Thick Paper (Unit: ppm or more)

Paper Size	EPL-6200				EPL-6200L	
	600 dpi		1200 dpi		600 dpi	
		ppm down*		ppm down*		ppm down*
A4	16.0	12.0	8.0	6.0	16.0	12.0
LGL	13.0	10.0	6.5	5.0	13.0	10.0
LT	16.0	12.0	8.0	6.0	16.0	12.0
B5	16.0	12.0	8.0	6.0	16.0	12.0
A5	16.0	12.0	8.0	6.0	16.0	12.0
EXE	16.0	12.0	8.0	6.0	16.0	12.0
HLT	16.0	12.0	8.0	6.0	16.0	12.0
Japanese official postcard	12.0	-	6.0	-	12.0	-
Envelopes	12.0	-	6.0	-	12.0	-

Note "*": For ppm down start timing, see "Thick paper ppm control (p.20)".

☐ Thick paper ppm control

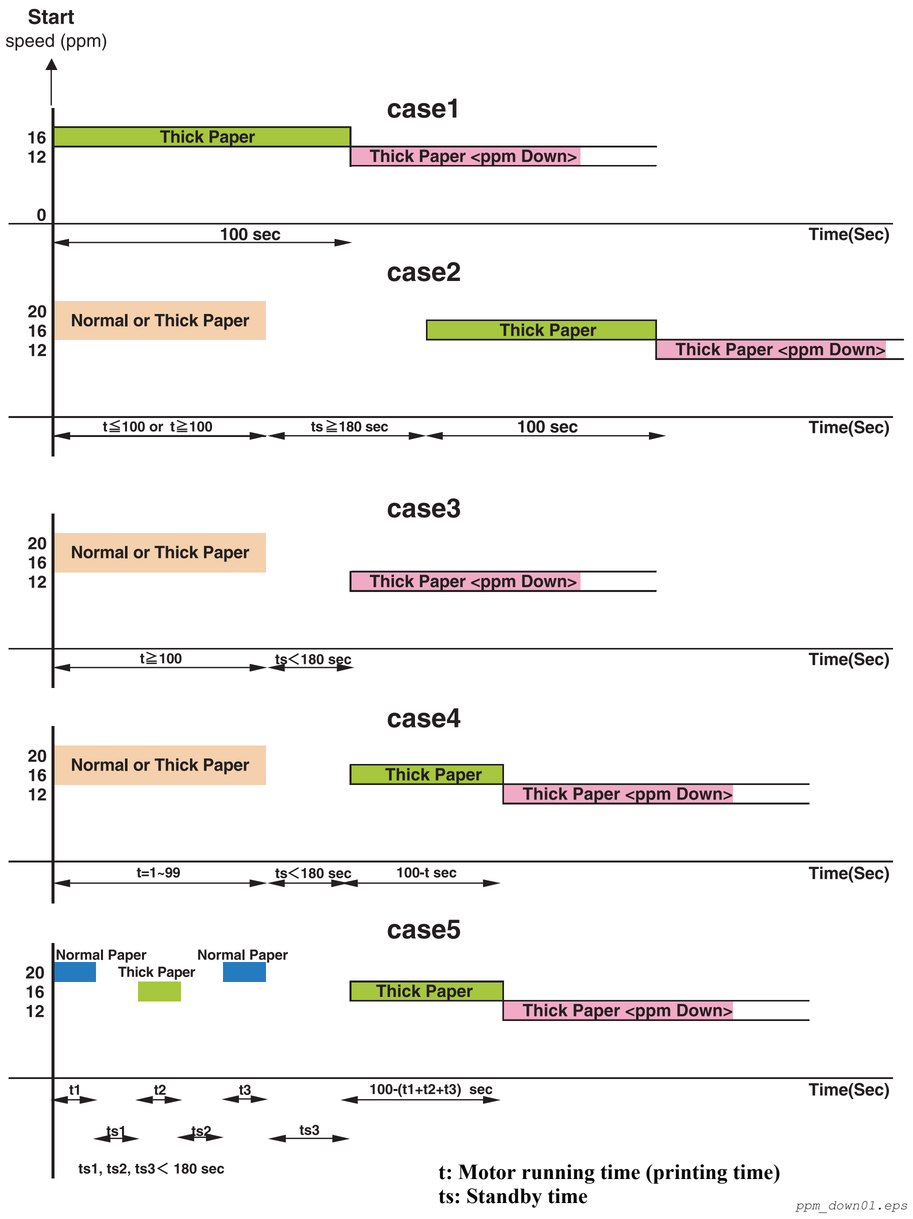
For thick paper printing, sheets of paper is fed at wider intervals (ppm Down) as described below to prevent temperature rise at both ends of the fuser unit.

- The ppm Down control will be started after a lapse of 100 seconds from the start of Thick Paper printing.

  NOTE: *However, if the motor has already been running for more than 100 seconds to execute jobs (continuous or intermittent printing) before starting thick paper printing, the ppm Down control is started at the beginning of Thick Paper printing. The motor running period of time for previous jobs is accumulated irrespective of paper types.*

- The motor running time will be reset when the printer keeps in standby status for 3 minutes.

See Figure 1-2, "Cases of ppm Down (for reference only)".


Start
speed (ppm)
case1
16
12
0
Thick Paper
Thick Paper <ppm Down>
100 sec
Time(Sec)
case2
20
16
12
Normal or Thick Paper
Thick Paper
Thick Paper <ppm Down>
t≦100 or t≧100
ts≧180 sec
100 sec
Time(Sec)
case3
20
16
12
Normal or Thick Paper
Thick Paper <ppm Down>
t≧100
ts<180 sec
Time(Sec)
case4
20
16
12
Normal or Thick Paper
Thick Paper
Thick Paper <ppm Down>
t=1~99
ts<180 sec
100-t sec
Time(Sec)
case5
20
16
12
Normal Paper
Thick Paper
Normal Paper
Thick Paper
Thick Paper <ppm Down>
t1
t2
t3
100-(t1+t2+t3) sec
Time(Sec)
ts1
ts2
ts3
ts1, ts2, ts3< 180 sec
ppm_down01.eps

t: Motor running time (printing time)
ts: Standby time

Figure 1-2. Cases of ppm Down (for reference only)

- ☐ Paper Feed Reference
  Centerline reference for each paper size and each paper feeder.
- ☐ Paper Feed:

Table 1-12. Paper Feed with "EPL-6200"

Paper Source		Capacity	Paper Type *3 and Paper Size	Feedable Paper Thickness *3
Standard	Paper Tray	300 sheets	**Standard paper:** FX-P Paper: A4	64 g/m^2
		250 sheets	**Standard paper:** XEROX 4024DP 20lb: Letter	75 g/m^2
			Standard paper: RX-80: A4	80 g/m^2
			Plain paper or regenerated paper: A4, B5, A5, Letter, GLT, Executive, LGL, GLG, F4, Half Letter	60~90 g/m^2
		5 sheets	**Transparencies:** A4, Letter	-
		10 sheets	**Labels:** A4, Letter	-
			Thick paper: A4, B5, A5, Letter, GLT, Executive, LGL, GLG, F4, Half Letter	90~163 g/m^2
		10 sheets	**Envelope:** Monarch, Com-10, DL, C5, C6, ISO-B5, Yokei #0*6, Yokei #4*6, Yokei #6*6, Chokei #3*6, Chokei #4*6, Kakugata #3*6	70~105g/m^2
		50 sheets*2	**Japanese official postcard** *1, **Japanese official reply-paid postcard** *1	190 g/m^2
		Height 29.5 mm	**Custom size paper *5:** 76.00 ~ 216.00 in width 127.00 ~ 356.00 in length	60~163g/m^2
	Manual feed tray	1 sheets	Standard paper, plain paper, special applications: A4, A5, Letter, GLT, Executive, LGL, GLG, F4, Half Letter, B5, Monarch, Com-10, DL, C5, C6, ISO-B5, Yokei #0*6, Yokei #4*6, Yokei #6*6, Chokei #3*6, Chokei #4*6, Kakugata #3*6 Custom size paper: 76.00 ~ 216.00 in width 127.00 ~ 356.00 in length	60~163 g/m^{2*4}
Optional	Lower cassette *4	500 sheets	A4	60~90 g/m^2

Table 1-13. Paper Feed with "EPL-6200L"

Paper Source		Capacity	Paper Type *3 and Paper Size	Feedable Paper Thickness *3
Standard	Paper Tray	180 sheets	**Standard paper:** FX-P Paper: A4	64 g/m^2
		150 sheets	**Standard paper:** XEROX 4024DP 20lb: Letter	75 g/m^2
			Plain paper or regenerated paper: A4, B5, ISO-B5, A5, Letter, GLT, Executive, LGL, GLG, F4, Half Letter	60~90 g/m^2
		5 sheets	**Transparencies:** A4, Letter	-
		10 sheets	**Labels:** A4, Letter	-
			Thick paper: A4, B5, ISO-B5, A5, Letter, GLT, Executive, LGL, GLG, F4, Half Letter	90~163 g/m^2
		10 sheets	**Envelope:** Monarch, Com-10, DL, C5, C6, ISO-B5, Yokei #0*6, Yokei #4*6, Yokei #6*6, Chokei #3*6, Chokei #4*6, Kakugata #3*6	70~105g/m^2
		50 sheets*2	**Japanese official postcard** *1, **Japanese official reply-paid postcard** *1	190 g/m^2
		Height 16 mm	**Custom size paper*5:** 76.00 ~ 216.00 in width 127.00 ~ 356.00 in length	60~163g/m^2

Note "*1": Curl must be straightened before feeding a postcard for printing of its back side in the course of manual duplex printing. (Set the postcard so that its side to be printed faces up and its curl is directed upward.)

"*2": For the second side printing, set not more than 20 sheets.

"*3": *Refer to "1.2.3 Paper Specification (p.26)".*

"*4": Cassette for A4 only

"*5": Custom size paper for special applications must not exceed the permitted setting number of sheets for each paper type.

"*6": JIS envelope

NOTE: *For custom size paper, refer to" Paper Feed Sizes and Paper Thickness (p.23)".*

☐ Available Paper Sizes, Paper Types, and Paper Orientation

Table 1-14. Available Paper Sizes, Paper Types, and Paper Orientation

Paper Size		Dimensions Length x Width in mm (inches)	EPL-6200				EPL-6200L	Paper Orientation
			MP Tray	Manual Feed Tray	Lower Cassette *4	Duplex Unit *4	Paper Tray	
Plain Paper	A4	297.00 x 210.00	○	○	○*3	○	○	SEF
	A5	210.00 x 148.00	○	○	–	–	○	SEF
	B5	257.00 x 182.00	○	○	–	○	○	SEF
	ISO-B5*5	250.00 x 176.00	○	○	–	–	○	SEF*2
	LT	279.40 x 215.90 (11.00” x 8.50”)	○	○	–	○	○	SEF
	HLT	215.90 x 139.70 (8.50” x 5.50”)	○	○	–	–	○	SEF
	LGL	355.60 x 215.90 (14.00” x 8.50”)	○	○	–	–	○	SEF
	EXE	266.70 x 184.15 (10.50” x 7.25”)	○	○	–	–	○	SEF
	GLG	330.20 x 215.90 (13.00” x 8.50”)	○	○	–	–	○	SEF
	GLT	266.70 x 203.20 (10.50” x 8.00”)	○	○	–	–	○	SEF
	F4	330.00 x 210.00	○	○	–	–	○	SEF

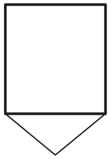
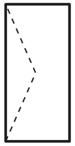
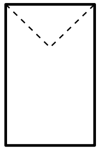
Table 1-14. Available Paper Sizes, Paper Types, and Paper Orientation

Paper Size			Dimensions Length x Width in mm (inches)	EPL-6200				EPL-6200L	Paper Orientation
				MP Tray	Manual Feed Tray	Lower Cassette *4	Duplex Unit *4	Paper Tray	
Special Applications	Japanese official postcard*1		148.00 x 100.00	○	○	–	–	○	SEF
	Japanese official reply-paid postcard *1		200.00 x 148.00	○	○	–	–	○	SEF
	Transparencies		A4: 297.00 x 210.00 LT: 279.40 x 215.90	○	○	–	–	○	SEF
	Labels		A4: 97.00 x 210.00 LT: 279.40 x 215.90	○	○	–	–	○	SEF
	Envelope*2	MON	190.5 x 98.43 (7 1/2” x 3 7/8”)	○	○	–	–	○	SEF*2
		C10	241.30 x 104.78 (9 1/2” x 4 1/8”)	○	○	–	–	○	SEF*2
		DL	220.00 x 110.00	○	○	–	–	○	SEF*2
		C5	229.00 x 162.00	○	○	–	–	○	SEF*2
		C6	162.00 x 114.00	○	○	–	–	○	SEF*2
		Yokei #0 *6	235.00 x 120.00	○	○	–	–	○	SEF*2
		Yokei #4 *6	235.00 x 105.00	○	○	–	–	○	SEF*2
		Yokei #6 *6	190.00 x 98.00	○	○	–	–	○	SEF*2
		Chokei #3 *6	235.00 x 120.00	○	○	–	–	○	SEF*2
		Chokei #4 *6	205.00 x 90.00	○	○	–	–	○	SEF*2
		Kakugata #3 *6	277.00 x 216.00	○	○	–	–	○	SEF*2

Note “*1”: Curls must be straightened for duplex printing by manual feeding.
“*2”: Refer to *“Envelope Orientation (p.23)”* for details on feeding direction of envelopes.
“*3”: The lower cassette is available with a fixed paper size.
“*4”: Option
“*5”: ISO-B5 can be handled also as an envelope.
“*6”: JIS envelope

Note : LEF (Long Edge Feed):the long edge of the paper is fed to the printer.
SEF (Short Edge Feed):the short edge of the paper is fed to the printer.

☐ Envelope Orientation

↑ Feeding Direction			
Envelope Types	Chokei #3 *1, Chokei #4 *1, Kakugata #3 *1	Yokei #0 *1, Yokei #4 *1, Yokei #6 *1, Monarch, Com-10, DL, C6	C5, ISO-B5

Note "*1": JIS envelope

NOTE 1: *Only envelopes without adhesive or adhesive tapes can be used.*

2: *Set the envelope with its side to be printed facing up.*

3: *JIS envelopes must be set in the directions as shown above depending on their flap positions.*

☐ Paper Feed Sizes and Paper Thickness

Table 1-15. Paper Feed Sizes and Paper Thickness (Unit: mm, g/m²)

Model	Paper Source	Paper width	Paper length	Paper thickness
EPL-6200	Printer body and Paper tray	76.00 ~ 216.00	127.00 ~ 356.00	60 ~ 163
	Manual feed tray	76.00 ~ 216.00	148.00 ~ 356.00	60 ~ 163
	Lower cassette unit (option)	A4 only		60 ~ 90
	Duplex Unit (option)	A4, LT, B5		60 ~ 90
EPL-6200L	Main unit	76.00 ~ 216.00	127.00 ~ 356.00	60 ~ 163

☐ Output Paper Capacity

Table 1-16. Output Paper Capacity:

	Standard
Output paper capacity *1	100 sheets
Paper sizes	All sizes which can be fed through the printer body (Regular or custom sizes)
Paper types *2	Standard paper, plain paper, special applications

Note "*1": In Environment A *"Ambient Conditions (p.64)"*. With standard paper immediately after unpacked

"*2": Refer to *"1.2.3 Paper Specification (p.26)"*.

☐ Dimensions and Weight

<EPL-6200>

- Stand Alone Outline Dimensions and Weights

Table 1-17. Stand Alone Outline Dimensions and Weights of "EPL-6200"

		Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
Standard	Output tray in storage position	407	436	261	7.0
	Output tray in use position	407	436	372	7.0
Optional	Lower cassette unit	401	438	119	4.0
	Duplex Unit	325	110	395	1.5

- Outline Dimensions and Weights with Options Installed

Table 1-18. Dimensions and Weights of "EPL-6200" with Options Installed

		Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
Main Unit + Lower cassette unit	Output tray in storage position	407	445	375	11.0
	Output tray in use position	407	445	486	11.0
Main Unit + Duplex Unit + Lower cassette unit	Output tray in storage position	407	509	375	12.5
	Output tray in use position	407	509	486	12.5

NOTE ***1:*** *Unpacked dimensions and weights are stated.*

2: *Dimensions have a tolerance of ±5 mm and weights have a tolerance of ±0.5kg.*

3: *The dimensions and weight of the Main Unit include those of the controller, but do not include those of consumables.*

4: *The Duplex Unit cannot be installed without the Lower Cassette Unit installed.*

<EPL-6200L>

- Stand Alone Outline Dimensions and Weights

Table 1-19. Stand Alone Outline Dimensions and Weights of "EPL-6200L"

		Width (mm)	Depth (mm)	Height (mm)	Weight (kg)
Standard	Output tray in storage position	385	279	261	6.0
	Output tray and Paper Tray in use position	385	405	372	6.0

NOTE ***1:*** *Unpacked dimensions and weights are stated.*

2: *Dimensions have a tolerance of ±5 mm and weights have a tolerance of ±0.5kg.*

3: *The dimensions and weight of the Main Unit include those of the controller, but do not include those of consumables.*

☐ Consumables:

- Developer Cartridge (black toner)
- Photoconductor Unit (Drum Cartridge)

NOTE: *Refer to "1.2.9 Consumable Components (p.32)".*

☐ Regular Replacement Parts

Without taking into account replacement by the user, the lives of regular replacement parts are as follows:

Fuser Unit:	50,000 pages
Transfer Roller:	50,000 pages

☐ Power Supply:

100 V ± 10%	50 ~ 60 Hz ±3 Hz
110 V - 10%	50 ~ 60 Hz ±3 Hz
127 V + 6%	50 ~ 60 Hz ±3 Hz
220 ~ 240 V ± 10%	50 ~ 60 Hz ±3 Hz

Applicable low-voltage power supplies are 100~120 V and 220~240 V only.

☐ Power Consumption

Table 1-20. Power Consumption

		EPL-6200			EPL-6200L		
		100 V	**12 0V**	**200 V System**	**100 V**	**120 V**	**200 V System**
Maximum current rated		9.2 A	8.0 A	4.5 A	9.2 A	8.0 A	4.5 A
Power Consumption	Maximum	900 W	900 W	861 W	900 W	900 W	825 W
	Average at continuous printing	376 Wh	370 Wh	372 W	378 Wh	372 Wh	357 W
	Average during standby with heater on	47 Wh	44 Wh	48 Wh	47 Wh	46 Wh	48 Wh
	Average during sleep mode with heater off	6 Wh	7 Wh	7 Wh	7 Wh	8 Wh	7 Wh
	Power off mode	0 Wh	0 Wh	0 Wh	0 Wh	0 Wh	0 Wh

☐ Product Lifetime

- Main Unit
  180,000 printed pages or 5 years, whichever comes first. (with periodic part replacement) → See "*Consumable Components (p.32)*".

☐ Noise

Table 1-21. Noise

	During standby	During printing	Sleep mode
Main Unit only	30.0dB(A) *1	54.0dB(A)	Background noise

Note "*1": The fan runs at a half speed.
However, it runs at a full speed for 20 seconds after printing.

☐ Exhaust Gas

Table 1-22. Exhaust Gas

Gas	Value
Ozone Concentration	0.02 mg/m^3 max.
Styrene Concentration	0.07 mg/m^3 max.
Dust Concentration	0.15 mg/m^3 max.

Note : By Blue Angel Mark measurement method

☐ Hazardous Materials:

None of the OPC, toner and plastics contains hazardous materials.

NOTE: *For safety standards, refer to "1.2.8 Compliance with Standards and Regulations (p.31)".*

☐ Current Consumption (EPL-6200)

Lower cassette:	5 V/ 0.03 A 24 V/ 0.5 A
Duplex Unit:	5 V/ 0.3 A 24 V/1.5 A

1.2.3 Paper Specification

1.2.3.1 Paper Type

- Standard Paper
  RX-80 paper: A4 / XEROX 4024 DP 20lb: Letter paper
- Plain Paper
  60 g/m^2 ~ 90 g/m^2 (16 lb ~ 24 lb)
  generally applied copy paper, regenerated paper
- Special Applications
  - Labels
  - Transparencies
  - Thick paper (90 ~ 163 g/m^2)
  - Envelopes

NOTE ***1:*** *lb: Ream weight = lb / 500 sheets/ 17" x 22" (431.8x558.8 mm)*
g/m^2: 1 g/m^2 = 0.2659763 lb

2: *The following types of paper should not be used with this printer. They could cause printing defects, paper jams or printer malfunctions.*

- *Carbon paper, non-carbon paper, thermal paper, impact paper, acid-based paper*
- *Paper that is too thin or too thick*
- *Paper that is wet or damp*
- *Paper with special coatings or colored paper with processed surfaces*
- *Too glossy (too slick on its surface) paper, or paper with too smooth/rough surfaces*
- *Paper with significantly different roughness on each surface*
- *Paper with punch holes or perforations*
- *Creased, curled or torn paper*
- *Irregularly shaped paper or paper with non-perpendicular corners*
- *Labels that peel off easily*
- *Paper with glue, staples or paper clips attached to it*
- *Ink jet paper for special applications (super-fine, glossy, glossy film, etc.)*
- *Paper that was previously used in a thermal or ink jet printer*
- *Transparencies for color photocopiers or color laser printers*
- *Sheets already printed on other color / monochrome laser printers or photocopiers*
- *Sheets of paper stuck together*
- *Four-leaf printed postcard, postcards made for inkjet printing, or press sealed postcards*
- *Iron print coated paper (for inkjet or laser printing)*
- *Sheets deteriorate or discolor by heat of the Fuser Unit of approximately 200℃.*

1.2.3.2 Paper Feedings

Table 1-23. Paper Feedings

		Standard Paper	**Plain Paper**	**Special Applications**			
				Transparencies	**Labels**	**Thick paper**	**Envelope**
Standard	Paper Tray	○	□	Δ	Δ	Δ	Δ
Optional	Lower Cassette*	○	□	×	×	×	×
	Duplex Unit *	○	□	×	×	×	×

Note "*": Use of Lower Cassette and/or Duplex Unit is not supported with EPL-6200L.

○ : Paper feed reliability and image quality assured.

□ : Paper feed reliability and image quality assured, but only for the use of generally applied types of paper.

Δ : Paper feed and printing are possible for only generally applied types of paper.

× : Sheets cannot be fed.

1.2.3.3 Printable Area

☐ Available Printing Area:
208.0mm × 348.0mm

☐ Guaranteed Printing Area:
All area of the sheet except vertical and horizontal margins of 4 mm (See illustration below)

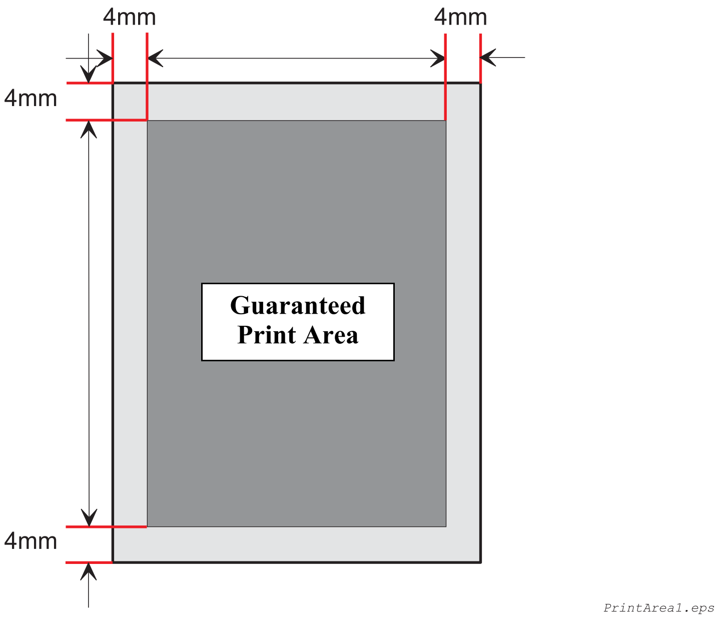


Figure 1-3. Guaranteed Print Area

1.2.4 Reliability, Durability, Serviceability

1.2.4.1 Reliability

☐ MPBF
25,000 pages

NOTE: *MPBF means an average number of pages printed until the occurrence of a malfunction which either requires the replacement of parts or cannot be solved by the user.*

☐ MTBF:
3000 hours (ten months) or more

NOTE: *MTBF means an average period of time until the occurrence of a malfunction which either requires the replacement of parts or cannot be solved by the user.*

☐ Paper Feed Reliability

Table 1-24. Paper Feed Reliability

Error type	Environment		
	A	B	C
Paper-jam rate[*1]	1/2000	2/2000	3/2000
Paper misfeed	1/2000	2/2000	3/2000
Multiple-sheet feed rate[*2]	1/500	2/500	3/500
Paper creasing	1/1000	2/1000	3/1000
Leading edge folded[*3]	1/1000	2/1000	3/1000

Note "*1": Includes paper jams caused by miss feeding, multiple-sheet feeding, and other kinds of jam. Does not include paper jams caused by multiple-sheet feeding at the boundary.

"*2": Does not include multiple-sheet feed at the boundary.
Boundary means sheets boundary between original paper and replenished paper, occurring after paper is replenished.

"*3": Includes 1 mm or more corner fold, but does not include less than 1 mm corner fold.

NOTE 1: *Based on use of paper taken from a newly opened package, that is, free from curls and any deterioration.*

2: *This reliability also applies to 1200 dpi printing with EPL-6200.*

3: *This reliability applies to all the relevant paper feeders.*

4: *See "1.12 Ambient Conditions (p.64)".*

☐ Printing Start Position Accuracy
(With standard paper fed from Paper tray or Lower cassette)

Table 1-25. Printing Start Position Accuracy

	Simplex	Duplex
Reference point of Main scanning direction (c)	±2.0 mm	±3.0 mm
Reference point of Sub scanning direction (a)	±2.5 mm	±3.0 mm

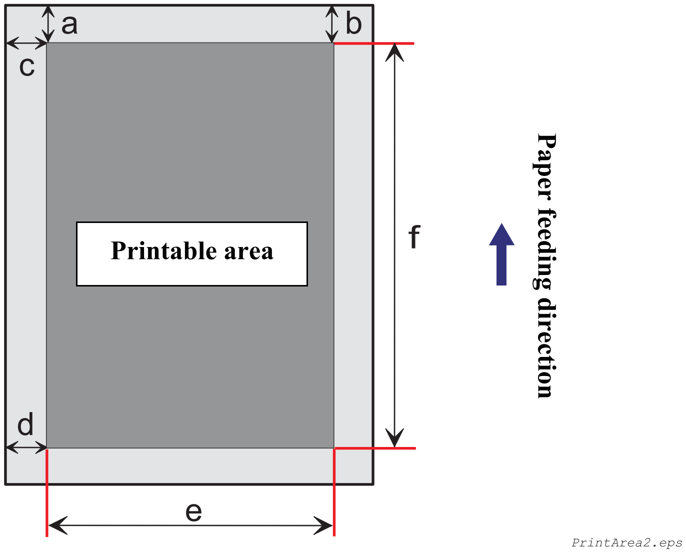


Figure 1-4. Printing Start Position Accuracy

☐ Skew

Table 1-26. Skew

Scanning Direction	Simplex: A4	Duplex: A4
Main scanning direction |a-b|	±1.59 mm	±2.12 mm
Sub scanning direction |c-d|	±2.08 mm	±3.13 mm

Measured based on the Dot 2 pattern.

Table 1-27. Skew

	A4
Between a and b	195.580
Between c and d	282.575

NOTE: *Specification values converted by the length of the Dot 2 pattern.*

☐ Height of Curl of Printed Pages

Table 1-28. Height of Curl of Printed Pages

Paper Size	Height
Plain paper	±30 mm or less
Transparencies	±20 mm or less
Other special applications	Not specified

1.2.4.2 Durability

☐ Printing Volume

Maximum 30,000 sheets / month
Average 2,500 sheets / month

1.2.4.3 Serviceability

☐ MTTR
Averages within 30 minutes.
(Time for service personnel to locate and correct the malfunction)

1.2.5 Operating Conditions (Including Consumables)

☐ Ambient Temperature and Humidity Conditions

Table 1-29. Ambient Temperature and Humidity Conditions

	Temperature (°C)	Humidity (%RH)	Others
Printer is under operation	10～35	15～85	No condensation
Printer is stopped	0～35	10～85	

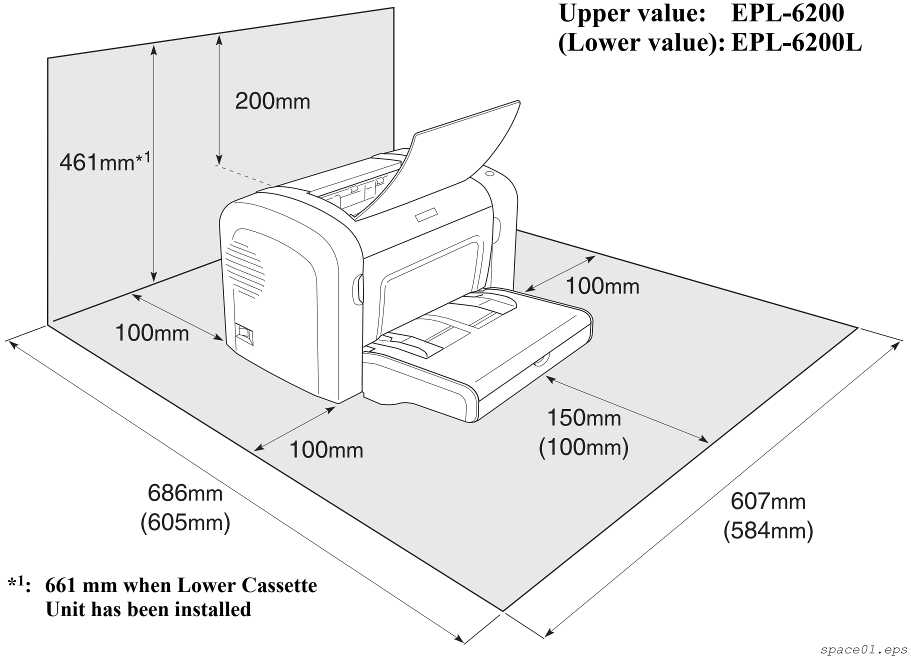
☐ Barometric Pressure
76.0 to 101.0 kpa (Altitude: 0 ~ 2500 m)

☐ Level
Differences between front and back, and left and right: within 1° of level

☐ Lighting
3000 lx or less (do not expose to direct sunlight)

☐ Space Requirements
In order to ensure that the printer operates properly, provide at least as much space as shown in the figure below.

Upper value: EPL-6200
(Lower value): EPL-6200L


200mm
461mm*1
100mm
100mm
100mm
150mm
(100mm)
686mm
(605mm)
607mm
(584mm)
space01.eps

***1: 661 mm when Lower Cassette Unit has been installed**

<Duplex Unit has been installed>

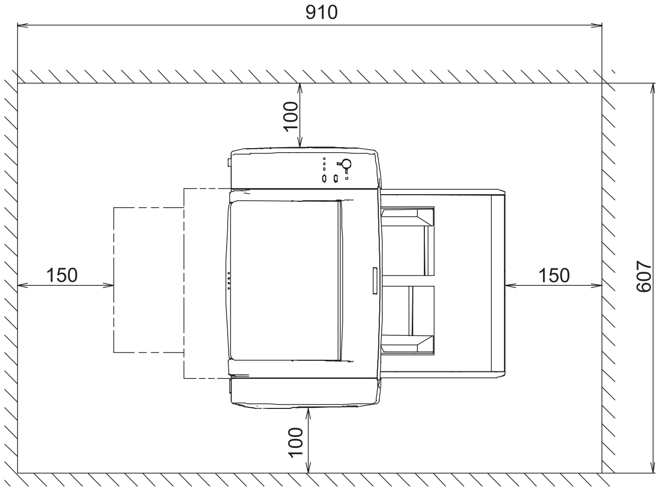

910
100
150
150
607
100

Figure 1-5. Required Surrounding Space

1.2.6 Storage and Transport of the Printer Main Unit and Optional Products (Consumables Packaged)

☐ Temperature and Humidity Conditions

Table 1-30. Temperature and Humidity Conditions

	Temperature (°C)	Humidity (%RH)	Warranty Period	Others
Normal Conditions	0～35	30～85	18 months	No condensation
Severe Conditions	High temperature: 35～40 Low temperature: -20～0	High humidity: 85～95 Low humidity: 10～30	1/30 of warranty period.	

☐ Transportation Barometric Pressure
61.3 ~ 101.3 kPa or more (460 ~ 760 mmHg)

☐ Dropping
No abnormalities according to JIS Z0200-1998 Level 1

☐ Vibration

■ Frequency:	5 ~ 100Hz (Sweep time: 10 minutes)
■ Acceleration:	1G
■ Direction of application:	3 dimensional
■ Time of application:	60 minutes along each X, Y, Z axis, 180 minutes in total

1.2.7 Electrical Features

☐ Fast Transient / Bursts (AC Line Noise)
IEC 61000-4-4 compliance

Voltage 1 k: no malfunction occurs such as defective image quality.
2 kV: no damage to parts allowed.

☐ Instantaneous Outages
DIP 100% (at rated current - 10%) one cycle.
No effect on printing quality

☐ Resistance to Static Electricity (IEC 61000-4-2 compliance)

■ Direct contact discharge:	4.5 kV
■ Indirect contact discharge:	4.5 kV
■ Aerial discharge:	8.5 kV

NOTE: *Even when electric discharge as mentioned above occurs, the printer shall keep operating normally without any trouble which affects the basic performance or which can lead to breakdown of the printer.*

☐ Inrush Current: 50 A or less (0-peak)

☐ Insulation Resistance: 10 MΩ or more (at DC 500 V)

☐ Dielectric Strength
No break down during application of the voltages shown below for one minute.

	Across primary and chassis
For 100 V models	AC 1000 V
For 110 to 127 V models	AC 1000 V
For 220 to 240 V models	AC 1500 V

☐ Leak Current

Intended Market	Leak Current
100 V (Japan)	0.25 mA or less
110 to 127 V models	3.5 mA or less
220 to 240 V models	3.5 mA or less

1.2.8 Compliance with Standards and Regulations

☐ Safety Standards

Table 1-31. Safety Standards

Model Name	Applicable Standards
100V	IEC60950 (1998) compliant
110V-120V	UL60950 3rd (2000) CSA-C22.2 No.60950-00 3rd IEC60950 3rd (1999) + Country’s Differences in CB Bulletin
220V-240V	IEC60950 3rd (1999) + Country’s Differences in CB Bulletin EN60950 (2000) + Annex ZB, ZC GB4943-1995

☐ Safety Standards (Laser Radiation)

Table 1-32. Safety Standards (Laser Radiation)

Model Name	Applicable Standards
100V	JIS C 6802+A1 (1998) compliant
110V-120V	FDA21CFR Chapter 1 Subchapter J, Part1040 IEC 60825-1+A1, 2 (2001)
220V-240V	EN 60825-1+A11, A2 (2001) IEC 60825-1+A1, 2 (2001)

Note : <Only for Information>

Laser power (max.):	15 mW
Wave length (average):	785 nm
Max. Average Radiation Power at laser aperture:	36.903 µW
Power on the OPC drum (max.):	1.044 µW

☐ EMC

Table 1-33.

Model Name	Applicable Standards
100V	VCCI Class B
110V-120V	FCC (47CFR) Part15 Subpart B Class B ICES-003: Issue3 class B (C108.8-M1983)
For 200 V system models	EN 550222(1998) Class B EN 61000-3-3+A1(2001) (Flicker) EN 55024(1998) (Immunity) CISPR 22 Class B GB9254(1998) Class B GB17625. 1-1998 Class A

☐ Electrical Harmonic Component
Complies with harmonic suppression guideline (JBMA)
EN61000-3-2 Class A(2000)

☐ Electrical Power Consumption
Conforms to International Energy Star Program standards

☐ Others

■ Toner:	Conforms to OSHA, TSCA, and EINECS (No materials hazardous to human health)
■ OPC:	Conforms to OSHA (No materials hazardous to human health)
■ Ozone generation:	Blue Angel mark compliant
■ Materials:	The materials do not contain any substances use of which is prohibited by laws of the market countries, and the contents of hazardous substances do not exceed their respective allowable levels.

1.2.9 Consumable Components

1.2.9.1 Specifications

Table 1-34. Consumable Specifications

Name	Contents	Life*1	Size (mm)	Weight (kg)	Initial Filling (g)
Developer Cartridge (toner cartridge)	• Developer, Toner hopper • Black, single component, nonmagnetic toner	Pre-installed (EPL-6200): 3,000 sheets*2 on an average	(w) 275 (D) 97 (H)	0.4	44.5 g ±5 g
		Pre-installed (EPL-6200L): 1,500 sheets*2 on an average		0.4	85 g ±5 g
		Replaced: 3,000 or 6,000 sheets *2 on an average		0.5	152 g ±5 g
Photoconductor Unit (Drum Cartridge)	• OPC drum (organic photoconductor) • Charger (Rotary Brush + Precharging Film)	20,000 sheets on an average	(w) 292 (D) 155 (H) 91	0.5	-

Note "*1": The number of sheets is the approximate number of printable images using A4 portrait continuous printing at 5% image occupation rate. The cartridge life varies according to the image occupation rate and type of printing (continuous, intermittent, printing density, and toner save mode).

"*2": The external shape varies with the lives and intended markets.

1.2.9.2 Packing Storage and Transport Environments

☐ Temperature and Humidity Conditions

Table 1-35. Temperature and Humidity Conditions

Conditions		Temperature	Humidity	Warranty Period
Normal		0～35°C	30～85%	18 months
Severe	High	35～40°C	85～95%	1/30 of warranty period
	Low	-20～0°C	10～30%	

☐ Transportation Barometric Pressure
Conforms to the same requirements as for the main unit.
61.3 ~ 101.3 kPa or more (460 ~ 760 mmHg)

☐ Dropping
No abnormalities according to JIS Z0200-1998 Level 1

☐ Vibration

■ Frequency: 5 ~ 100Hz (Sweep time: 5 minutes)
■ Acceleration: 1G
■ Direction of application: 3 dimensional
■ Time of application: 60 minutes along each X, Y, Z axis, 180 minutes in total

1.3 External Appearance and Parts Name

1.3.1 Overall Dimensions of EPL-6200

Figure 1-6 *(p.33)* to Figure 1-9 *(p.33)* show the overall dimensions of EPL-6200.

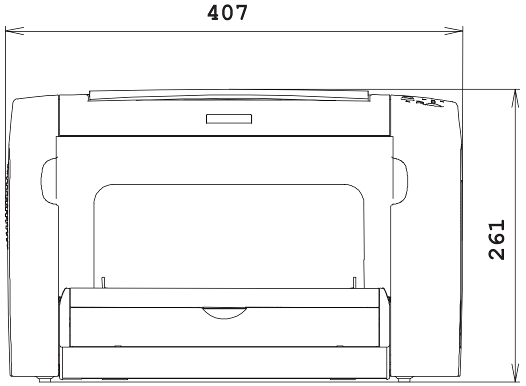


Figure 1-6. Front View of EPL-6200

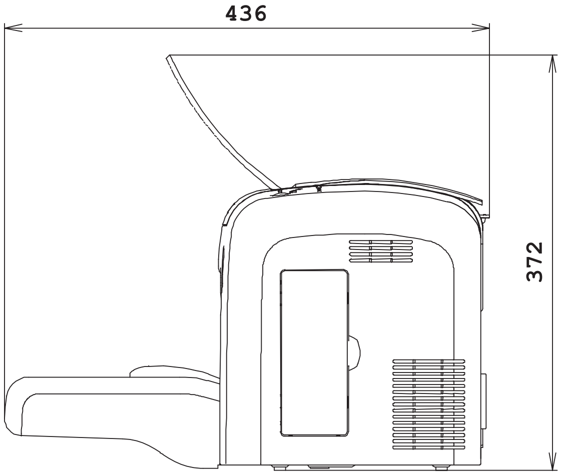


Figure 1-7. Right Side View with Output Tray in Use

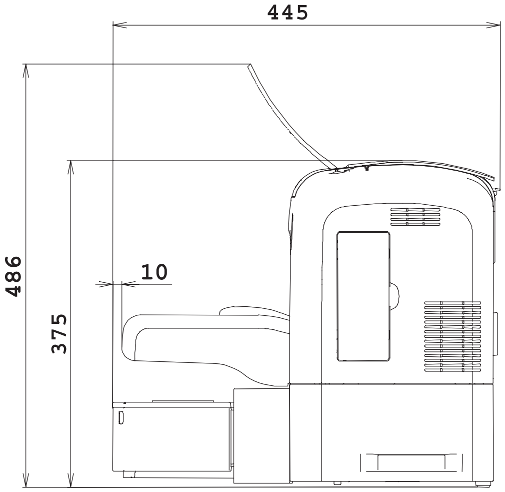


Figure 1-8. Right Side View with Lower Cassette installed

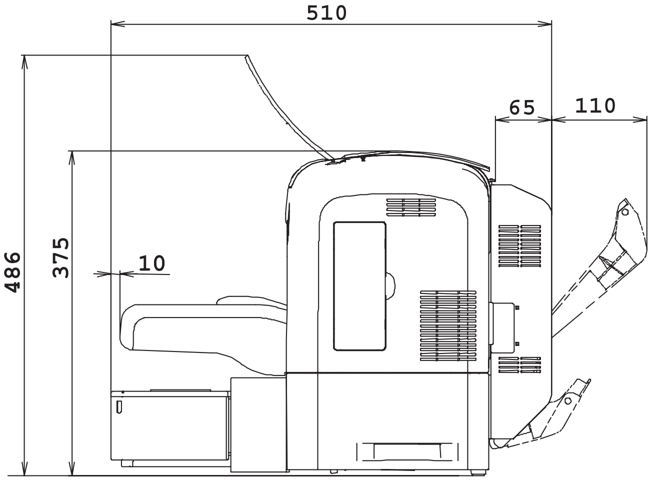


Figure 1-9. Right Side View with Lower Cassette and Duplex Unit installed

1.3.2 Overall Dimensions of EPL-6200L

Figure 1.3.1 *(p.33)* to Figure 1-11 *(p.34)* show the overall dimensions of EPL-6200L.

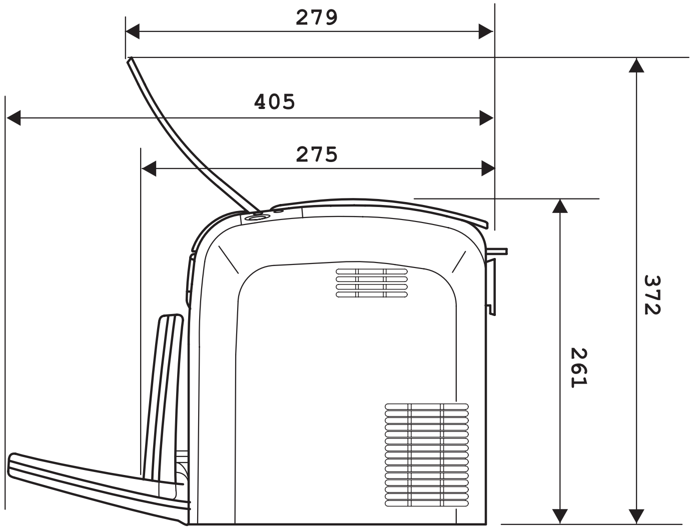


Figure 1-10. Right Side View with MP Tray and Output Tray in Use

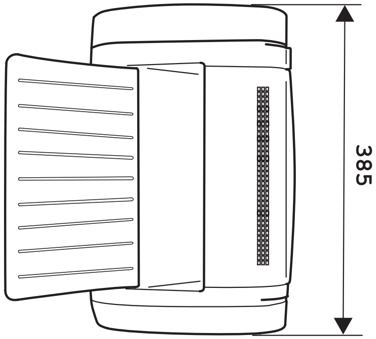


Figure 1-11. Top View

1.3.3 Names of Parts of EPL-6200

Table 1-36. Names of Parts

Symbol	Name	Symbol	Name
1	Control Panel	12	Parallel Interface Connector
2	Manual Feed Tray / Paper Guide	13	Duplex Unit Connector Cover
3	MP Tray / Manual Feed Tray	14	Output Cover
4	Front Cover	15	Output Tray
5	Paper Cassette Front Cover	16	Lower-cassette Unit (option) Paper Cassette Cover
6	Power Switch	17	Lower-cassette Unit (option) Paper Cassette
7	Optional RAM Cover	18	Lower-cassette Unit (option) Feeder Unit
8	Duplex Unit Gear Cover	19	Duplex Unit (option)
9	AC Inlet	20	Duplex Unit (option) Connector Cover
10	Type-B Interface Slot Cover	21	Duplex Unit (option) Cover 1
11	USB Interface Connector	22	Duplex Unit (option) Cover 2

<Top View>

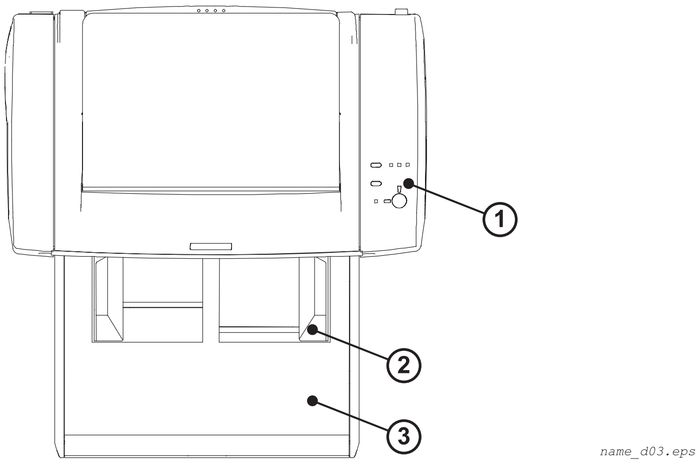
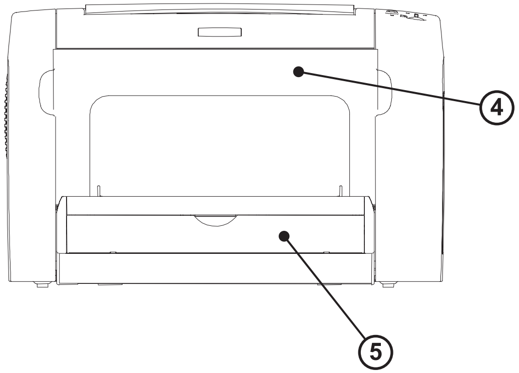
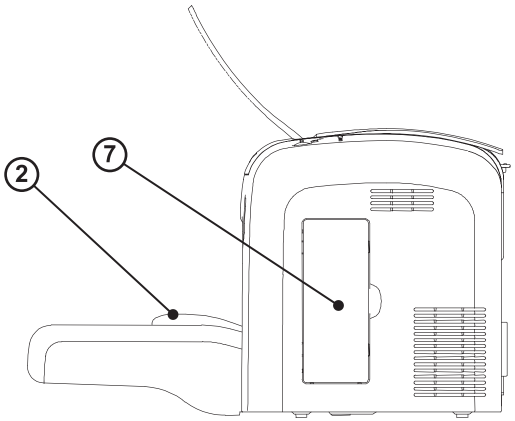


Figure 1-12. EPL-6200 Names of Parts 1

<Front View>



<Right Side View>



<Left Side View>

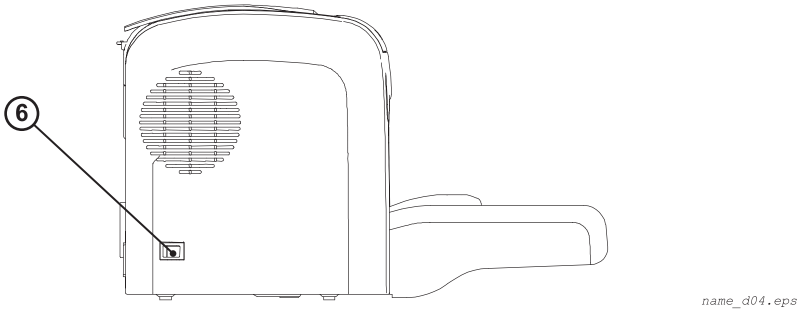
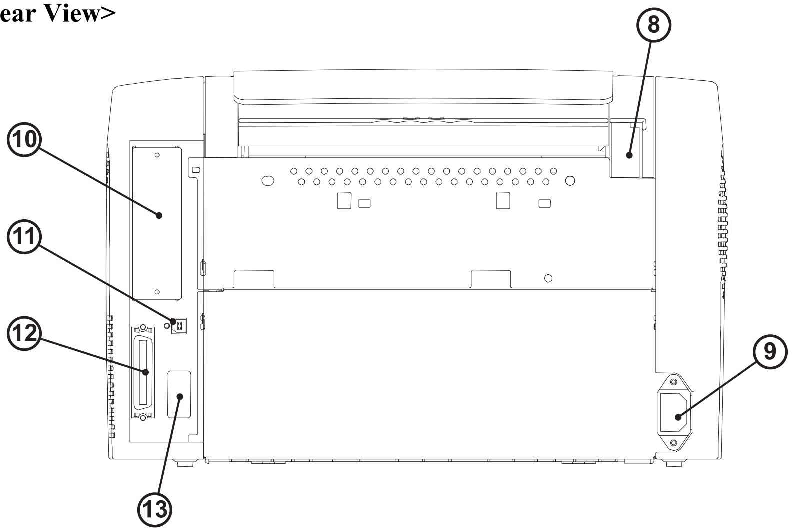
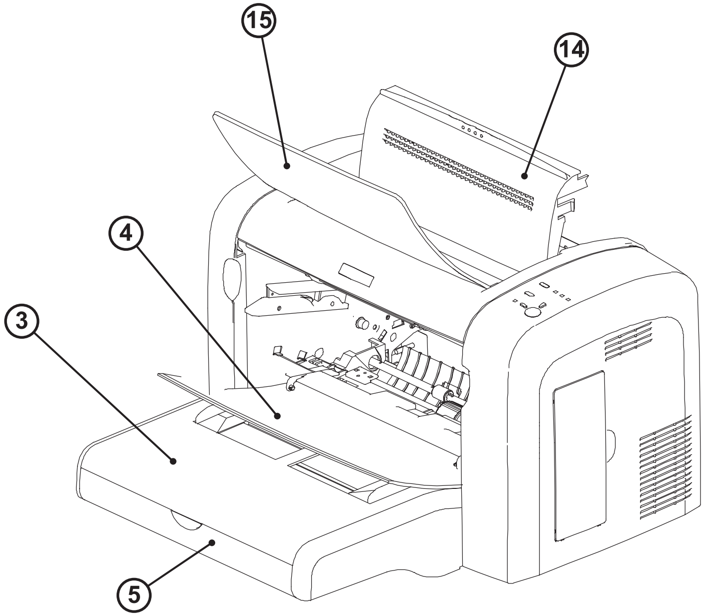


Figure 1-13. EPL-6200 Names of Parts 2

<Rear View>


8
10
11
12
9
13

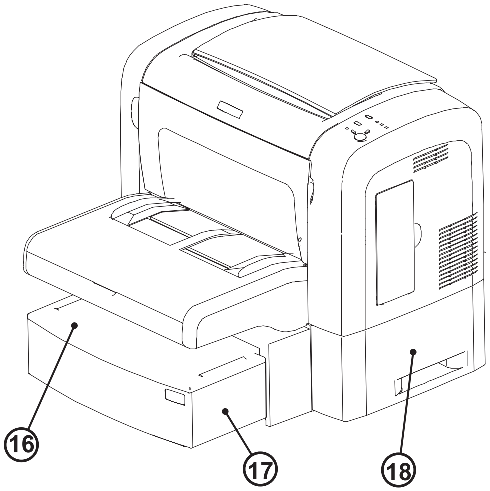
<View with Covers opened>



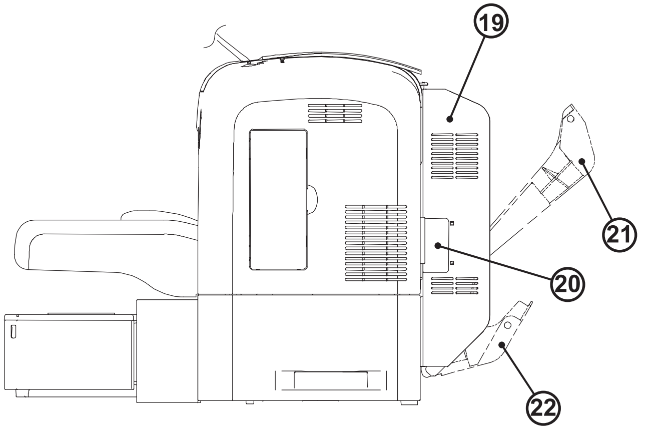
name_d05e.eps

Figure 1-14. EPL-6200 Names of Parts 3

<View with Lower Cassette Unit installed>



<View with Duplex Unit and Lower Cassette Unit installed>



name_d06j.eps

Figure 1-15. EPL-6200 Names of Parts 4

1.3.4 Names of Parts of EPL-6200L

Table 1-37. Names of Parts

Symbol	Name
1	Output Tray
2	LED
3	Front Cover
4	Paper Tray
5	Power Switch
6	Parallel I/F Connector
7	USB I/F Connector
8	AC Inlet
9	Output Cover

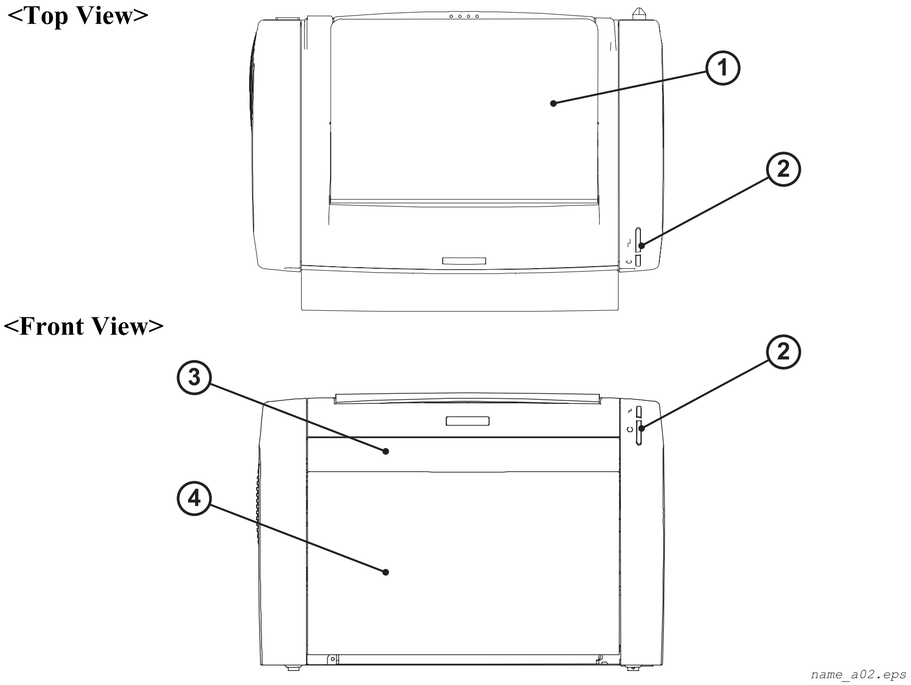

<Top View>
1
2
<Front View>
3
2
4
name_a02.eps

Figure 1-16. EPL-6200L Names of Parts 1

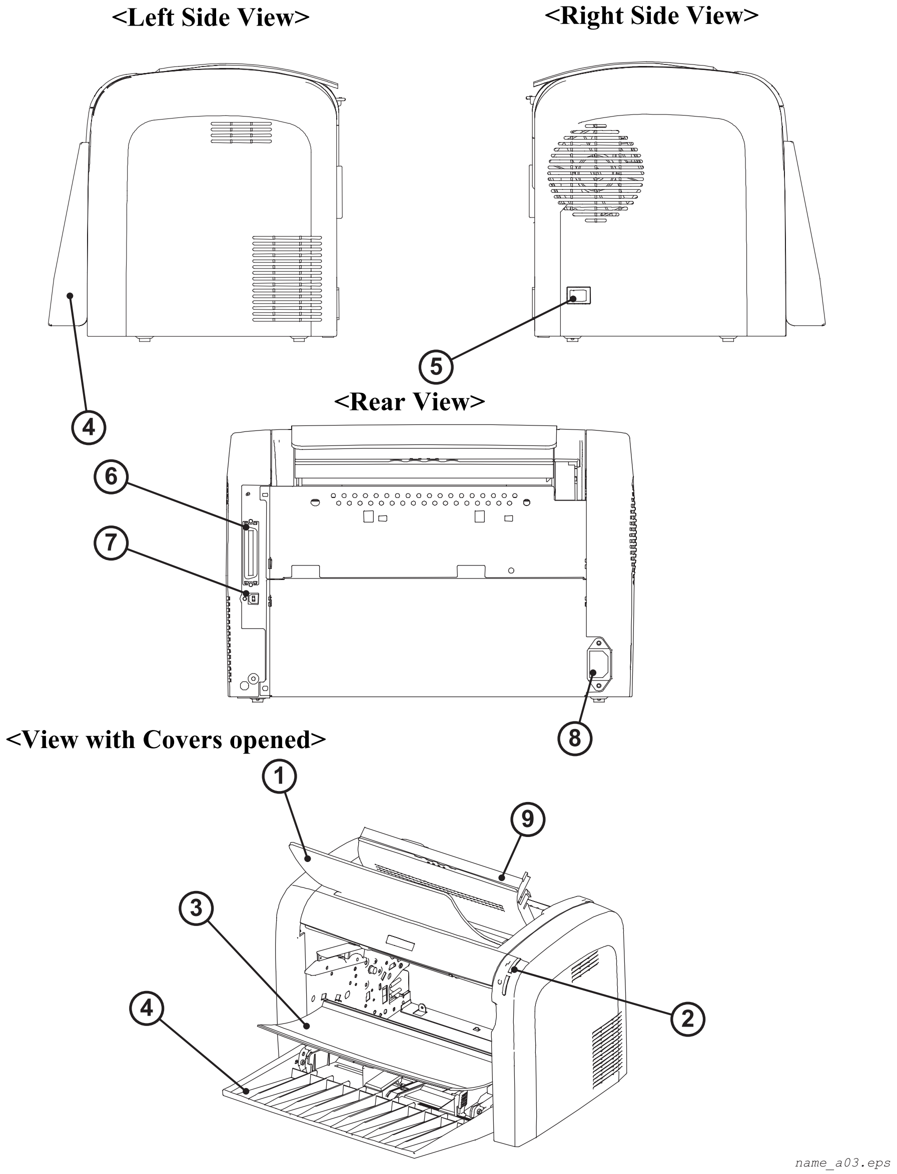

<Left Side View>
<Right Side View>
5
4
<Rear View>
6
7
8
<View with Covers opened>
1
9
3
4
2
name_a03.eps

Figure 1-17. EPL-6200L Names of Parts 2

1.4 Controller Specification

1.4.1 Basic Controller Specifications

EPL-6200

☐ CPU	TMPR4955BFG-200MHz (Same as for EPL-N2500)
☐ RAM	
<Standard>	8 MB (SDRAM) (mounted on ROM DIMM board)
<DIMM Option>	16 MB, 32 MB, 64 MB, 128 MB (SDRAM, 1 slot) Maximum136 MB (with 128 MB SDRAM DIMM installed)
☐ ROM	
<Fonts, Program>	Mixed in 16Mbyte (mounted on ROM DIMM board) Flash memory by initial production; mask ROM by steady production
<Expansion ROM>	None
☐ Host Interface	
<Standard>	
Parallel	IEEE1284 compliant bi-directional interface, Type B connector Compatibility, Nibble, ECP
USB	USB Revision 1.1
Option	Type B slot (1 slot)
☐ Control Panel	3 switches and 6 LEDs
☐ Installation Format	Fixed to the printer body
☐ Other	A mechanical control function is incorporated
☐ Installed emulations	PCLXL, PCL5e, GL/2, FX, ESCP2, I239X, ESC/Page PostScript 3

EPL-6200L

☐ CPU	EPSON 32bit RISC S1C33000 48MHz
☐ RAM	
<Standard>	2MB
<Expansion>	None
☐ Interface	IEEE 1284 compatible parallel interface (ECP, Nibble)
☐ USB	USB Revision 1.1 compatible, USB ID compatible
☐ Panel	2 LEDs
☐ Other expansion slots	None

1.4.2 External I/F Specifications

EPL-6200/EPL-6200L is equipped with the external host interfaces as listed below:

Table 1-38. External Host Interfaces

		EPL-6200	EPL-6200L
Standard	IEEE1284 parallel interface	○	○
	USB interface (USB Revision 1.1)	○	○
Optional	Optional Type-B I/F Card slot	○	–

NOTE: *Switching between host interfaces is automatic only. Each interface cannot be switched on and off individually.*

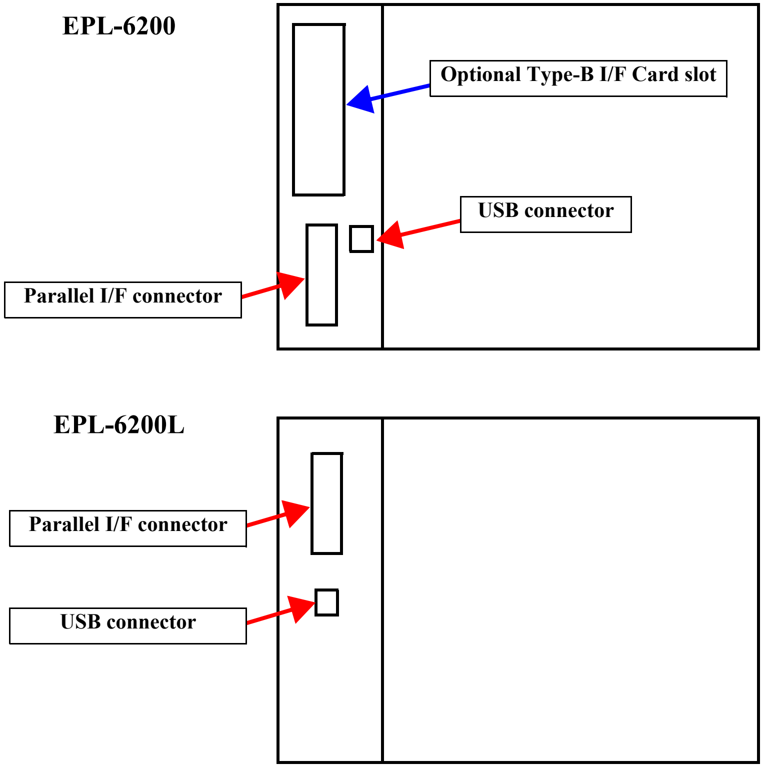


Figure 1-18. Rear View (Interface Bracket)

1.4.2.1 Parallel Interface Specifications

Table 1-39. Parallel Interface Specifications

Item	Description
Interface Type	IEEE 1284 bi-directional high speed parallel interface
Operating Modes	Compatibility, Nibble, ECP
Connector Model Names	57RE-40360-830B (D7A) DDK or equivalent products
Conforming Plugs	AMPHENOLE or equivalents

The initial Device ID value of this printer is described below:

☐ EPL-6200

```
MFG:EPSON;CMD:PJL,EJL,ESCPL2,ESCP9,PRPXL24-01,PCL,HPGL2-01,ESCPAGE-
04,PCLXL,POSTSCRIPT;
MDL:EPL-6200;
CLS:PRINTER;
DES:EPSON EPL-6200;
```

☐ EPL-6200L

```
MFG:EPSON;CMD:ESCPAGES-02;MDL:EPL-6200L;CLS:PRINTER;DES:EPSON EPL-6200L;
```

1.4.2.2 USB Interface

Supports Windows USB PnP.

Supports the 18-digit USB ID as follows:

****P++YYMMDDhhmmssR**

**: A number of 00 to 99. Acquired for each model.
"24" for EPL-6200. "23" for EPL-6200L.

P: Identifier. Always "P" for page printers.

++: PC number of assembly line. (00~99)

YY: The year of assembled date. (lower two digits; 00~99)

MM: The month of assembled date. (01~12)

DD: The assembled date (01~31)

hh: Hour of assembled time. (00~23)

mm: Minute of assembled time. (00~59)

ss: Second of assembled time. (00~59)

R: Reserved and always "0" with EPL-6200/EPL-6200L.

The USB ID written into the printer can be checked on the Status Sheet.

CAUTION

If the circuit board is replaced, or other service performed, the USB ID may be changed to another ID (this is because the USB ID is rewritten when the EEPROM storing the USB ID is damaged or the circuit board is replaced).In this case, if a printer with the USB ID changed is connected to the PC, it is recognized as a different printer, so the PC requires the USB port driver to be installed again.

1.4.2.3 Type B Interface (Not Available with EPL-6200L)

EPL-6200 is equipped with one Type-B option I/F slot as standard.

☐ Main System Type:
MTP1200dpi, PW10200dt1200dpi, PRG(****)rev, AP500ma, SPD0fast, D4

NOTE: *****: ROM version*

☐ Printer Name :Factory default setting is the same as Product Name.

☐ Product Name : EPL-6200

☐ Emulation Type / Entity Type

Table 1-40. Emulation Type / Entity Type

Emulation	Emulation Type	Entity Type
PS	POSTSCRIPT-00	LaserWriter
ESC/Page	ESCPAGE-04	EPSONPAGE4
LJ4	PCL5E-00	EPSONPCL5
I239X	PRPXL24-01	EPSONPRPXL24
GL/2	HPGL2-01	EPSONHPGL2
FX	ESCP9	EPSONFX
ESCP2	ESCPL2	EPSONLQ2
PCLXL	PCLXL	EPSONPCLXL

1.5 Control Panel (EPL-6200)

1.5.1 External Appearance and Names of Parts

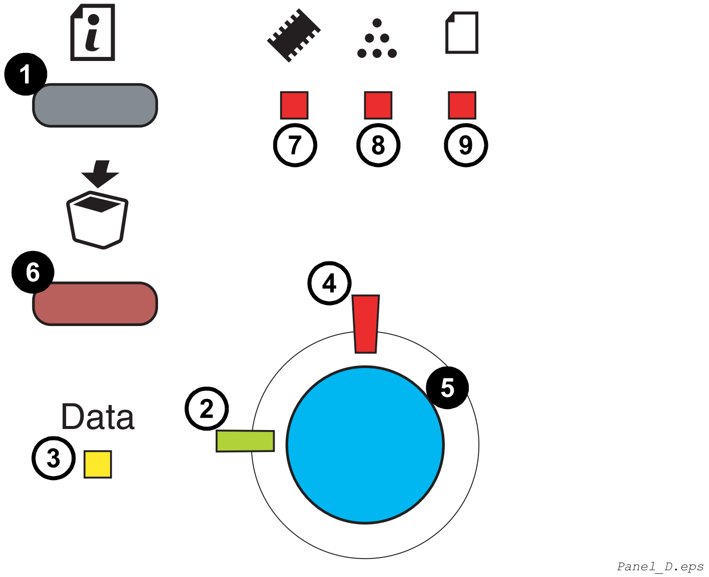


Figure 1-19. Control Panel of EPL-6200

Table 1-41. Buttons and LEDs of EPL-6200

No.	Name	Note
1	Information Switch	Color: Gray
2	Ready LED	Color: Green
3	Data LED	Color: Yellow
4	Error LED	Color: Red
5	Start/Stop Switch	Color: Pale green
6	Job Cancel Switch	Color: Brick red
7	Memory LED	Color: Red
8	Toner LED	Color: Red
9	Paper LED	Color: Red

1.5.2 List of Settings

This section describes setting items for EPL-6200.
The setting items are described in groups for each tab screen of the printer driver.

Values shown in bold and underlined characters are the factory default setting values.

☐ Basic Settings

Table 1-42. Setting Items (Basic Settings)

Item	Dialog *1	Item	Setting Value
Paper Size			(Page size)
Orientation			Portrait, Landscape
Paper Source			MP Tray, Auto Selection, Lower Cassette *2
Paper Type *3			Unspecified, Plain, Letterhead, Recycled, Color, Transparency, Labels, Thick Wide, Thick Narrow
Print Quality	(Resolution)		600 dpi, True 1200 dpi, Class 1200 dpi
	More Settings	Graphics *4	None, Halftoning, EnhMG
			Smooth ↔ Sharp
			Light ↔ Dark
		RIT *5	ON, OFF
		Toner Save	ON, OFF
Copies			(Number of copies to be printed)
Collate			ON, OFF

Note "*1": Click the button on the tab screen to open a dialog box for further setting items.

"*2": Added when Lower Cassette has been selected on Optional Settings

"*3": You can specify a paper kind only when Auto Selection has been selected by Paper Source setting.
However, Duplex printing is not available with Transparency, Labels, Thick Wide or Thick Narrow.
A paper type error occurs if the Paper Type setting does not agree with either of the settings of MP Tray Paper Type and Cassette 1 Paper Type on Printer Settings.

"*4": "None" .... No graphics printing processing (no gray scale or intermediate tone expression)

"Halftoning"............... Halftoning (gradation expression processing) will be executed

"EnhMG" .... EnhancedMicroGray function is used for gradation expression processing. (Not available with 1200 dpi)

"*5": Contour and shaded area of characters will be corrected. (Not available with 1200 dpi)

☐ Layout

Table 1-43. Setting Items (Layout)

Item	Dialog *1	Item	Setting Value
Zoom Option			ON/, OFF
	(When Zoom Option is ON)	Output Paper	(Page size)
		Zoom To	50 ~ 200% (in 1% increments)
		Location	Upper Left, Center
Print Layout			ON, OFF
Rotate by 180			ON, OFF
Duplex *2			ON, OFF
	(When Duplex is ON)	Binding	Left, Top, Right

Note "*1": Click the button on the tab screen to open a dialog box for further setting items.
"*2": Duplex printing is restricted to the paper sizes of A4, B5 and LT.

☐ Special

Table 1-44. Setting Items (Special)

Item	Dialog *1	Item	Setting Value
Watermark			ON, OFF
Form Overlay			ON, OFF

Note "*1": Click the button on the tab screen to open a dialog box for further setting items.

☐ Optional Settings

Table 1-45. Setting Items (Optional Settings)

Item	Dialog *1	Item	Setting Value
Update the Printer Option Information Automatically			ON, OFF
Update the Printer Option Information Manually			ON, OFF
	Settings	Installed Memory	8, 24, 40, 72, 136
		Optional Paper Sources	No Optional Paper Source, Lower Cassette
		Duplex Print Unit	ON, OFF
Status Sheet			–
Printer Settings	(See "Printer Settings" *(p.42)*)		
Extended Settings	(See "Extended Settings" *(p.43)*)		

Note "*1": Click the button on the tab screen to open a dialog box for further setting items.

■ Printer Settings

Table 1-46. Printer Settings

Item		Setting Value
Sleep Mode		**Enable**, Disable
MP Tray Paper Size		A4, A5, B5, LT, HLT, LGL, EXE, GLG, GLT, F4, MON, C10, DL, C5, IB5, C6
Time Out		60 ~ 300 sec (in 10-sec steps)
Parallel I/F	Speed	**Fast**, Normal
	Bi-D	**ECP**, Nibble, Off
	Buffer Size	**Normal**, Maximum, Minimum
USB I/F	Buffer Size	**Normal**, Maximum, Minimum
AUX I/F	Buffer Size	**Normal**, Maximum, Minimum
Error Code		**Ignore**, Space
Page Protect		**Auto** ON
Toner Out Error		Stop, **Continue**
Auto Continue *1		ON, **OFF**
Avoid Error *2		ON, **OFF**
Dot Correction *3		ON, **OFF**
MP Tray Paper Type		(Paper kind)
Cassette 1 Paper Type		(Paper kind)
Reset OPC Level		OK / Cancel

Note "*1": Selects whether to continue printing processing at occurrence of some error, such as "Print Overrun", "Paper Set", "Mem Overflow" or "Duplex Mem Overflow", by releasing the printer from the error status automatically or to stop printing processing.
ON: continue, OFF: stop (default)

"*2": Selects whether or not to avoid the occurrence of "Print Overrun" error in ESC/Page mode.
ON: avoid, OFF: does not avoid (default)

"*3": Selects whether or not to make compensation at printing of extreme fine lines (equivalent to 1 dot) in 1200 dpi to prevent breaks in each line.
Invalid when [Graphic Mode] = "High Quality (PC)"
ON: Dot correction, OFF, No dot correction (default)

- Extended Settings

Table 1-47. Extended Settings

Item			Setting Value
Graphic Mode *1			**High Quality (Printer)**, High Quality (PC)
TrueType Font			Print TrueType fonts as bitmap, Print TrueType fonts with substitution
Panel Settings			Uses the settings specified on the printer, Uses the settings specified on the driver
	Offset	Front Top	-30 ~ **0** ~ +30 mm (in 0.5mm steps)
		Front Left	-30 ~ **0** ~ +30 mm (in 0.5mm steps)
		Back Top	-30 ~ **0** ~ +30 mm (in 0.5mm steps)
		Back Left	-30 ~ **0** ~ +30 mm (in 0.5mm steps)
	Density		1, 2, **3**, 4, 5
	Slip Blank Page		ON, **OFF**
	Ignore the selected paper size		ON, **OFF**
High Speed Graphics Output			ON, OFF
[Hidden Functions] *2	Humidity		Normal, High
	Physical Offset *2	Feed Offset	-3.5 ~ +3.5 mm (in 0.5mm steps)
		Scan Offset	-3.5 ~ +3.5 mm (in 0.5mm steps)
		Feed Offset2	-3.5 ~ +3.5 mm (in 0.5mm steps)
		Scan Offset2	-3.5 ~ +3.5 mm (in 0.5mm steps)
	Engine Status Sheet		–
Uses the spooling method provided by the operating system			ON, **OFF**

Note "*1": Selects whether to perform printing processing on the PC side ("High Quality (PC)") or on the printer side ("High Quality (Printer)").

"*2": To display the setting dialog box for the hidden functions, click the "Extended Settings" button on the "Optional Settings" page while holding down [ALT] + [CTRL] + [Z] keys.
For details, see "1.6.4.2 Printer Adjustment (Hidden Function)" *(p.55)*.

"*3": Specify physical compensation values to adjust the paper feeding position. Based on these values for Physical Offset, the Printing Area location is adjusted according to the setting values for Offset in the Panel Settings on the "Extended Settings" dialog box.

CAUTION

Do not disclose any hidden functions to users.

1.5.3 Printer Messages

A list of printer messages with EPL-6200 is shown below.

Table 1-48. Printer Messages

Printer Status	Status	EJL Status	LED Indications					
			Error LED	Memory LED	Toner LED	Paper LED	Ready LED	Data LED
Service Req effff *1	Service call error	6000	On	On	On	On	On	On
Service Req Eggg *2	Service call error	6XXX	On	Off	Off	Off	On	On
Option RAM Error	Error	-	On	On	Off	Off	Off	-
ROM CHECK*3	Status	-	Off	Off	Off	On	Off	Off
RAM CHECK*3	Status	-	Off	Off	On	Off	Off	Off
Unable Clear Error*3	Status	-	Off	-	-	-	Off	-
Self Test*3	Status	-	Off	On	Off	Off	Off	Off
Cancel All Print Job	Status	1003	Blink 1	Blink 1	-	Off	Blink 1	-
Cancel Print Job	Status	1003	Blink 1	Off	-	Off	Blink 1	-
Jam X X X X *4	Error	4234*4	On	Off	Off	On	Off	-
Install Imaging Cart	Error	4235	Off	Off	On	Off	Off	-
Image Cart ID Error	Error	4237	Off	Off	On	Off	Off	-
NonGenuine Toner	Error	4241	Blink 1	Off	On	Off	Off	-
Image Cart R/W Error	Error	4238	On	Off	On	Off	Off	
Front Cover Open *5	Error	4239*5	On	Off	Off	Off	Off	-
Exit Cover Open *5								
DuplexUpperCoverOpen *5								
DuplexLowerCoverOpen *5								
Manual Feed tttt	Error	1013	Blink 2	Off	Off	Blink 2	Blink 2	-
Can't Print Duplex	Error	3005	Blink 1	Off	Off	On	Off	-
Paper Out sssss tttt	Error	4010	On	Off	Off	Blink 1	Off	-
Replace Toner	Error	4236	Blink 2	Off	On	Off	Off	-
Paper Set sssss tttt	Error	3003	Blink 1	Off	Off	Blink 1	Off	-
Print Overrun	Error	3000	Blink 1	On	Off	Off	Off	-
Mem Overflow	Error	3001	Blink 1	On	Off	Off	Off	-
Duplex Mem Overflow	Error	3004	Blink 1	On	Off	Off	Off	-
Invalid PS3	Error	4201	On	On	Off	Off	Off	-
Invalid Aux I/F Card	Error	4014	On	On	Off	Off	Off	-
Write Error ROM P*3	Error	4006	On	On	Off	Off	Off	-
Writing ROM P*3	Status	1005	-	-	-	-	Off	Blink 1
Reserve JobCanceled	Warning	2565	(Off)	Blink 1	-	-	-	-

Table 1-48. Printer Messages (continued)

Printer Status	Status	EJL Status	LED Indications					
			Error LED	Memory LED	Toner LED	Paper LED	Ready LED	Data LED
Can't Print	Warning	2072	(Off)	Blink 1	-	-	-	-
Collate disabled	Warning	2013	(Off)	Blink 1	-	-	-	-
Check Paper Size	Warning	2004	(Off)	-	-	Blink 1	-	-
Image Optimum	Warning	2002	(Off)	Blink 1	-	-	-	-
Check Paper Type	Warning	2008	(Off)	-	-	Blink 1	-	-
Need Memory	Warning	2003	(Off)	Blink 1	-	-	-	-
Form Feed *3	Status	1008	(Off)	-	-	-	-	Blink 1
(Printing Status Sheet by panel operation)*3	Status	1010	(Off)	-	-	-	-	Blink 1
Warming Up	Status	1006	(Off)	-	-	-	Blink 1	-
Offline	Status	1001	Blink 3	-	-	-	Off	-
Cancel Print Job (by host)	Status	1003	Blink 1	-	-	-	Blink 1	-
Toner Low	Warning	2571	(Off)	-	Blink 1	-	-	-
NonGenuine Toner	Warning	2571	(Off)	-	Blink 3	-	-	-
(Processing Job)*3	Status	1002	-	-	-	-	-	-
Sleep	Status	1007	(Off)	-	-	-	Blink 3	-
Ready	Status	1000	(Off)	-	-	-	On	-
(Printing)*3	Status	1009	(Off)	-	-	-	-	-
(Communicate with non-active I/F)*3	Status	1012	-	-	-	-	-	-

Note "*1": This pattern and the pattern of the engine error (service call) are alternately displayed depending on the error details.

"*2": This pattern and the pattern of the service call error are alternately displayed depending on the error details.

"*3": Must not be disclosed to users.

"*4": XXXX means the appropriate one of the following four locations. If paper is jammed at two or more locations, one of them is displayed in the following order of priority.
Output, Printer, Feeder, Duplex

"*5": Only one of these four cover open errors is indicated in the following order of priority, even if two or more errors have occurred at the same time. (Only one is displayed on the 20-digit LCD.) (Displayed characters TBD)
Front Cover Open, Output Cover Open, DuplexUpperCoverOpen, DuplexLowerCoverOpen

NOTE: *In the table above, the items of Printer Status are listed in the order of priority. (Upper items have higher priority)*

- *When an error and a warning occur simultaneously, a warning message does not appear.*
- *When a warning occurs during occurrence of another warning, all the corresponding LEDs flash.*
- *The "-" mark shows that the indication of the LED is independent of the relevant printer status. This LED can flash or light up if a printer status of a lower priority occurs.*

CHECK POINT

Refer to 3.1.6 Printer Messages (EPL-6200) *(p.102)* for details of service call errors.

1.5.4 Special Operation (EPL-6200)

With EPL-6200, the functions described below are activated by holding the specified switches down when turning the printer on.

CAUTION

The functions other than Hexadecimal Dump and Photoconductor Life Reset must not be disclosed to the user.

Table 1-49. Special Operation

Function	Methods of operation
Hexadecimal dump	“Start/Stop” and power on *1
Photoconductor life reset	“Start/Stop” + “Information” and power on *1,*2
Initializing EEPROM	“Start/Stop” + “Job Cancel” + “Information” and power on*1,*2
Initializing the panel setting value	“Job Cancel” and power on*1,*2
Program ROM update mode	“Job Cancel” + “Information” and power on*3
CPU reset + Printing of error sheet	Press the Information Switch at occurrence of a service call error. An error sheet will be printed after warm boot.
Engine program ROM update mode	“Start/Stop” + “Job Cancel” and power on*4

Note “*1”: The Ready LED and Error LED light up simultaneously when the printer recognizes the function. Then all the LEDs go out once for one second or so.

“*2”: When the switches are released, the Ready LED and Error LED light up simultaneously, and keep lighting during execution of the function.

“*3”: Release the switches when only the Ready LED starts flashing. (Other LEDs light up)
The Ready LED flashes, while the Paper, Toner and Memory LEDs light up.
Upon completion of download, only the Ready LED flashes.

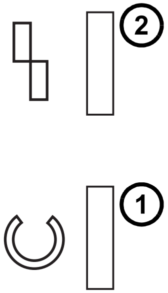
“*4”: Release the switches when only the Online LED starts flashing.
During data reception: Online LED lighting + Data LED flashing slowly
During data transfer to engine: Online LED lighting + Data LED flashing + Paper, Toner or Memory LED lights up sequentially
During other processing: Online LED lighting + Data LED flashing
At writing end: Online LED flashing slowly + Error LED lighting

☐ Error Related LED Indications

- ■ Size of received data is different from the specification:
  Error LED flashing + Paper LED lighting
- ■ Mechanical Controller is not Flash:
  Error LED flashing + Toner LED lighting
- ■ Model code of Mechanical Controller is different from that of the file:
  Error LED flashing + Memory LED lighting
- ■ Some other error:
  Error LED flashing
- ■ Error that can not be identified:
  All LEDs flashing

1.6 Control Panel (EPL-6200L)

1.6.1 External Appearance and Names of Parts



Panel_A.eps

Figure 1-20. Control Panel of EPL-6200L

Table 1-50. Buttons and LEDs of EPL-6200L

No.	Name	Note
1	Ready LED	Color: Green
2	Error LED	Color: Red

☐ Meaning of LED Flashing on EPL-6200L

Table 1-51. Meaning of LED Flashing

Ready LED	Error LED	Supplement	Meaning
Off	Off	-	Power off
On	Off	-	Ready to print (It include warning status)
Blink 1	Off	-	Moving to Ready status. Warming up, receiving data is included.
Blink 3	Off	-	Warning for consumables Non genuine consumables warning
Off	Blink 1	-	–
Blink 1	Blink 1	Green and red blink alternately	Engine Error It is a service call error.
Blink 1	Blink 1	Green and red blink simultaneously	RAM check error (RAM is not installed.)
Blink 1 and Off	Blink 1	1. Green: On, Red: On 2. Green: Off, Red: Off 3. Green: Off, Red: On 4. Green: Off, Red: Off 5. Return to pattern 1	It is a service call error except or Engine Error. Ex) IPL Error
On	Blink 1	-	Recoverable Errors by Status Monitor. Ex.) Underrun Error Replace paper error
Off	On	-	Controller Error It is a service call error. Ex.) Video Error Data Expansion Error EEPROM Access Error Software Error
Blink 1	On	-	Protocol Error It will be fixed after you turn it power off.
On	On	-	Recoverable Errors without power off. Ex) Cover Open Paper jam (Paper Out)

Note 1: The both two LEDs lights for a while when printer power turned on.

2: During Checking RAM Ready LED flash. (Interval time: On: 0.1sec Off: 0.1sec)
(But the time of checking RAM is very short, then the flashing may not visible.)

3: Interval time
Flashing1: On 0.3sec, Off 0.3sec
Flashing3: On 0.6sec, Off 2.4sec

1.6.2 Printer Setting Items

A list of setting items for this printer is shown below.

☐ Setting Items for which the Printer Stores the Changed Settings

Table 1-52. Function Setting (1)

Setting item	Setting values
Sleep Mode	**ON**, OFF *1
Toner Out Error	**Continue**, Stop
Physical OffsetTop *2	-3.5 ~ **0** ~ 3.5 (mm) step 05.mm
Physical Offset Left *2	-3.5 ~ **0** ~ 3.5 (mm) step 05.mm
Humidity *2	**Normal**, High

Note : Values shown in bold and underlined characters are the factory default setting values.

Note “*1”: 15 minutes.

“*2”: These setting operations are not opened to users.
For setting method, see “Special Operation (EPL-6200L) *(p.54)*”.

☐ Setting Items that are Valid only in the Job, and are not be Stored in the Printer

Users can select setting items on the printer driver, and actual processing is performed by the printer.

Table 1-53. Function Setting (2)

Setting item	Setting values
Paper Size	A4, A5, B5, LT, HLT, LGL, GLT, GLG, EXE, F4, MON, C10, DL, C5, C6, IB5, User defined size User defined size Width 76.2. ~ 216.0mm Length 127.0 ~ 355.6mm
Copies	1 ~ 999
Toner Save	ON, OFF
Top Offset	-9 ~ 0 ~ 9 mm
Left Offset	-9 ~ 0 ~ 9 mm
Paper Type	Normal, Thick-Wide, Thick-Narrow Transparency
Density	1, 2, 3, 4, 5
Auto Continue	ON, OFF
Ignore Paper Size	ON, OFF

☐ Setting Items Requiring Administration by the Printer for each Printing or state change

Table 1-54. Function Setting (3)

Administrative	items Range of values
*Total Pages	0 ~ 99999999 pages
*Jam Counts	0 ~ 65534 times
*Genuine Toner Change	0 ~ 254
*Non genuine Toner Change	0 ~ 254
*Toner Life counter	0 ~ 100% (Both 3K and 6K will reset to 100% by counter reset)
*Photoconductor Life counter	0 ~ 100%
*USB ID	
MP Tray Paper Size	A4, A5, B5, LT, HLT, LGL, GLT, GLG, EXE, F4, MON, C10, DL, C5, C6, IB5, User defined size
Interface mode of Parallel I/F	ECP, Nibble
Firmware version	
*Registration position (paper feed direction)	-5.98 ~ 5.98 mm step 0.46mm
CSIC items	

Note : The “*” means that those items are under control of EEPROM.

CHECK POINT

Since character strings administrated in the printer do not exist, names of setting items and setting values are described in names for explanation. Consequently, these names do not match character strings displayed in driver's user interfaces and the Status Sheet.

1.6.3 Status

1.6.3.1 Status List

Items of printer status generated in this printer are listed below:

Table 1-55. Printer Status

Status description	Status code	Ready LED	Error LED
Software Error	6000	Off	On
Engine Error	6001 ~ 6008, 6014	Flash 1 [*1]	Flash 1 [*1]
Protocol Error	-	Flash 1	On
RAM Check Error	-	Flash 1	On
IPL Error	-	[*1]	Flash 1
Exiting Paper Jam	4012	Off	Flash
Paper Jam	4008	Off	Flash
Feed Jam (Paper Out)	4009	Off	Flash
Install Imaging Cart	4235	Off	Flash
Image Cart ID Error	4237	Off	Flash
NonGenuineToner Cart	4241	Off	Flash 1
Image Cart R/W Error	4238	Off	Flash 1
Toner Out	4236	Off	Flash 1
Front Cover Open	4002	Off	Flash
Exit Cover Open	4025	Off	Flash
Paper set Error	3003	Off	Flash 1
Invalid Paper Size	3002	Off	Flash 1
Print Underrun	3000	Off	Flash 1
Memory Overflow	3001	Off	Flash 1
Multi copy Error	2013	On	Off
Check Paper Size (warning)	2004	On	Off
Print Failure	2568	On	Off
Warming Up	1006	Flash	Off
Toner Low	2017	Flash 3	Off
Worn Photoconductor (5% or less)	2010	Flash 3	Off
NonGenuineTonerCart (warning)	2571	Flash3	Off

Table 1-55. Printer Status (continued)

Status description	Status code	Ready LED	Error LED
Sleep Mode	1007	On	Off
Ready	1000	On	Off
Printing Job	1009	Flash1	Off
Processing Job	1002	Flash1	Off
Non-active Interface	1012	-	-

Note "*": For details of flashing patterns, refer to "Meaning of LED Flashing on EPL-6200L *(p.47)*".

CHECK POINT

- **Following status are listed in priority order. Above is higher priority.**
- **Refer to *"3.1.6.1 Service Call Error (p.102)"* for details of engine errors.**

1.6.3.2 Details of Status Messages and Processing

☐ Warming Up

- Description

  The printer is warming up.

- Processing

  The printer becomes ready to print automatically after approximately eight seconds.
  (It takes approximately twenty one seconds for the printer to get ready after power on.)

☐ Printing Job

- Description

  The printer is printing.

☐ Non-active Interface

- Description

  The printer is processing a job through another interface.
  At this moment, your computer can not send data to printer.

  - Processing

    The printing will start automatically after completion of the current job.

- Processing Job
  - Description

    The printer is processing a print job
- Sleep mode
  - Description

    The printer is in sleep mode.
  - Processing

    The printer becomes ready to print after receiving printing data.
- Ready
  - Description

    The printer is ready to print (normal status).

1.6.3.3 Details of Error Status and Processing

- Exiting Paper Jam
  - Description

    A paper jam has occurred around the paper ejecting area.
    The error is cleared when there is no longer any paper jam detected.
    After error recovery, data for one page retained in the printer memory are recovered if it is possible, and if the data cannot be recovered, the printer returns a resending request. The data is recovered when the printer does not perform a flying start. Cleaning is executed after the error recovery.

    NOTE: *The printer displays an Exiting Paper Jam status if the Output Cover is open at power on.*
  - Remedy

    Remove the jammed paper, close the Output Cover and close the front cover. Then printing resumes from the jammed page.
    The pop-up display of the EPSON Status Monitor disappears after error recovery.
- Paper Jam
  - Description

    A paper jam occurrence inside of the printer.
    The error is cleared when there is no longer any paper jam detected.
    After error recovery, data for one page retained in the printer memory are recovered if it is possible, and if the data cannot be recovered, the printer returns a resending request. The data is recovered when the printer does not perform a flying start. Cleaning is executed after the error recovery
  - Remedy

    Remove the jammed paper and close the front cover. Printing resumes from the jammed page.
    The pop-up display of the EPSON Status Monitor disappears after error recovery.

☐ Feed Jam (Paper Out)

- Description

  No paper has been fed even though printer has started printing action.
  The error is cleared when there is no longer any paper jam detected after opening and closing the front cover.
  After error recovery, data for one page retained in the printer memory are recovered if it is possible, and if the data cannot be recovered, the printer returns a resending request. The data is recovered when the printer does not perform a flying start. Cleaning is not executed after the error recovery.

- Remedy

  If there is no paper, set paper and open and close the front cover. In the case of a jam, remove the jammed paper which was not fed and open and close the front cover. Then printing resumes from the jammed page. The pop-up display of the EPSON Status Monitor disappears after error recovery.
  The error can be cleared through the Status Monitor even without opening and closing the cover.

☐ Install Imaging Cart

- Description

  The Imaging Cartridge is not set or not set correctly. The error is cleared when the Imaging Cartridge is detected.
  (When no CSIC is found, the error occurs.)

- Remedy

  Open the cover, set the Imaging Cartridge properly and close the cover again to clear the error. The pop-up display of the EPSON Status Monitor disappears after error recovery.

☐ 5)Imaging cartridge ID error

- Description

  The Developer Cartridge is not for this printer or the cartridge is broken.
  This error will occur when the printer judges the Developer Cartridge is not the appropriate EPSON worldwide model with a capacity of 3k or 1.5K.

- Remedy

  Open the cover, set the correct Developer Cartridge and close the cover again to clear the error. The pop-up display of the EPSON Status Monitor disappears after error recovery.

☐ NonGenuineToner Cart

- Description

  The installed Developer Cartridge (toner cartridge) is judged to be not EPSON genuine.

  CAUSE 1. The manufacture ID is not the ID of EPSON.
  2. The toner counter has been returned.

- Remedy

  Open the cover, set the correct Developer Cartridge (toner cartridge) and close the cover again to clear the error. The pop-up display of the EPSON Status Monitor disappears after error recovery.
  If user want to use the non genuine cartridge, select [Continue] on the EPSON Status Monitor.
  After select [Continue], NonGenuineTonerCart warning occurs.

☐ Image Cart R/W Error

- Description

  Normal access to the CSIC of the Developer Cartridge is impossible.
  This error will be cleared when it is detected that a Developer Cartridge with a normal CSIC has been set.

- Remedy

  Open the cover, set the correct Developer Cartridge and close the cover again to clear the error. The pop-up display of the EPSON Status Monitor disappears after error recovery.

☐ Toner Out

- Description

  The toner life counter has reached the end of its service life (0%).
  When the consumables expire while printing is underway, the operation stops before the next page is printed. This error occurs only when Toner Out Error = STOP.

- Remedy

  Replacing the Developer Cartridge (toner cartridge) with a new one clears the error, and the pop-up message of the EPSON Status Monitor disappears.

  NOTE: *If you change the Toner Out Error = Continue, then the status becomes Toner Low and you can print again.*

- ☐ Front Cover Open
  - ■ Description

    Font printer cover is open.
    This error is cleared when the cover is not detected to be open any longer.
  - ■ Remedy

    When the cover is closed, the error is cleared, and the pop-up display of the EPSON Status Monitor disappears accordingly.
- ☐ Exit Cover Open
  - ■ Description

    Output Cover is open.
    This error is cleared when the cover is not detected to be open any longer.

    NOTE: *The printer displays an Exiting Paper Jam status if the Output Cover is open at power on.*
  - ■ Remedy

    When the cover is closed, the errors disappear, and the pop-up display of the EPSON Status Monitor disappears accordingly.
- ☐ Paper Set
  - ■ Description

    Since the paper size specified by Paper Size setting differs from the paper size recognized by the size detected by printer itself, operation stops before printing.
    The Continue command of the ESCPAGES-02 protocol clears the error in the printer engine, and the error in the printer is cleared accordingly. The ResetPrinter command releases the error in the printer engine resetting the printer to the initial status.
    This error does not occur when the specified paper size is an undefined paper size, and when “Size Ignore = ON” or “Auto Continue=ON” is selected. This error occurs only once in one document.
  - ■ Remedy

    Insert appropriate paper, and select [Continue] on the EPSON Status Monitor.
    To reprint after modifying driver settings, select [Cancel Printing] on the EPSON Status Monitor.
- ☐ Invalid Size
  - ■ Description

    Since an unsupported paper size was specified or a different feeding direction, such as A4 Long Edge Feed, was selected, operation stopped before printing.
    The Continue command of the ESCPAGES-02 protocol clears the error, and printing resumes from the next page. When “Auto Continue = ON” this error dose not occur and the page is printout.
    Printing will be achieved if the printer driver can clip the image to A4.
    Therefore, this error will not occur when you use a proper printer driver.
  - ■ Remedy

    To print pages after “Invalid Size”, select [Continue] on the EPSON Status Monitor.
    To reprint after modifying driver settings, select [Cancel Printing] on the EPSON Status Monitor.
- ☐ Print Underrun
  - ■ Description

    Data was not sent from the host during processing of a document and time-out occurred. Then printing began, but the band data is insufficient. Resetting the printer to the initial status by the ResetPrinter command of the ESCPAGES-02 protocol clears the error.
    When “Auto Continue = ON” is set and printer can not printout the page “Print Failure” is displayed instead of the error, and resumes printing the next page.
    This error does not occur when “Auto Continue=ON” or “Avoid Page Error = ON” is selected.
  - ■ Remedy

    If data receiving is not completed, selecting [Reprint] on the EPSON Status Monitor performs printing successfully in some cases, as a result that the printer driver resends data without a flying start.
    To reprint after modifying driver settings, select [Cancel Printing] on the EPSON Status Monitor.
- ☐ Mem Overflow
  - ■ Description

    Printing was not successful since the data for one page was not saved due to insufficient memory at printing operation without flying-start or printing was not successful because of insufficient memory at a flying start resulting from

"Near Buffer Full". The Continue command of the ESCPAGES-02 protocol releases the error, and printing resumes from the next page. When "Auto Continue = ON", the printer displays the "Print Failure" warning instead of this error, and resumes printing the next page.

- ■ Remedy

  To print pages after "Mem Overflow", select [Continue] on the EPSON Status Monitor.
  To reprint after modifying driver settings, select [Cancel Printing] on the EPSON Status Monitor.

1.6.3.4 Details of Warning Status and Processing

☐ Multi Copy Error

- ■ Description

  Band data of the page for multi-copying has not been saved for one page completely.
  This warning is cleared by the ResetFlag command of the ESCPAGES-02 protocol.
  This warning status occurs before completing sending data for one page in some cases, however continuing to send the data prints only one sheet.

- ■ Remedy

  This warning occurs only at printing operation by a flying start. After occurrence of this warning, however, data are resent "the number of copies n - 1" times from the printer driver, so that this warning status is not displayed on the user interface.

☐ Check Paper Size

- ■ Description

  The paper size that was actually fed differed from the paper size recognized by the paper size detected by printer itself.
  This warning is cleared by the ResetFlag command of the ESCPAGES-02 protocol.
  This warning does not occur when the specified paper size is an undefined paper size, and when "Size Ignore = ON" is selected.

NOTE 1: *The warning does not occur in the following situation:.*
The printer is shared by some PCs and printer changes the control PC before occurrence of warning on the previous PC.

2: *Regarding the following envelopes, the paper size for this check is extended by 5 cm as the flap:*
Yokei0, Yokei4, Yokei6, Yokei 3, Chokei4, Chokei3, MON, C10, DL, C5, C6, IB5

- ■ Remedy

  Clicking the [Close] button closes the pop-up display of the EPSON Status Monitor. However, if an error of higher priority occurs just after that, the display changes to the error display. From this point the status is never displayed until it occurs again.

☐ Print Failure

- ■ Description

  This warning appears when "Auto Continue=ON" and any of the following conditions has occurred in the printer.

  - Memory Overflow
  - Printer could not printout a page due to Print Underrun

  This warning is cleared by the ResetFlag command of the ESCPAGES-02 protocol.

- ■ Remedy

  Clicking the [Close] button closes the pop-up display of the EPSON Status Monitor. However, if an error of higher priority occurs just after that, the display changes to the error display. From this point the status is never displayed until it occurs again.

NOTE: *Check Paper Size*
The warning does not occur in the following situation:.
The printer is shared by some PCs and printer changes the control PC before occurrence of warning on the previous PC.

☐ Toner Low

- ■ Description

  Toner Cartridge life counter is 10% or less of 3000-sheet capacity Developer Cartridge.
  It occurs even if the level is 0% in case of the Toner Out Error = Continue.

- ■ Remedy

  Clicking the [Close] button once closes the pop-up display of the EPSON Status Monitor. However, it will be displayed again if the warning is still remain after changing another status.

When you replace the Developer Cartridge (toner cartridge), the pop-up message of the EPSON Status Monitor disappears.
(The toner counter reset can be executed even if you do not replace the Developer Cartridge.)

- Worn Photoconductor
  - Description

    Photoconductor life is 5% or less.
  - Remedy

    Clicking the [Close] button once closes the pop-up display of the EPSON Status Monitor. However, it will be displayed again if the warning is still remain after changing another status.
    Replace the Photoconductor Unit and reset the counter by printer driver. As a result, the pop-up message of the EPSON Status Monitor disappears. (The Photoconductor reset can be executed even if you do not replace the Photoconductor Unit.)
- NonGenuineTonerCart
  - Description

    Installed Developer Cartridge (toner cartridge) is not EPSON genuine.
  - Remedy

    Open the cover, set the correct Developer Cartridge (toner cartridge) and close the cover again to clear the error. The pop-up display of the EPSON Status Monitor disappears after error recovery.
    However, it will be displayed again if the warning is still remain after changing another status.

1.6.4 Special Operation (EPL-6200L)

This section describes the special operation functions of EPL-6200L.

CAUTION

This function, a hidden function, must not be opened to users.

1.6.4.1 EEPROM Initialization

The setting values in the printer are cleared. The following items are initialized:

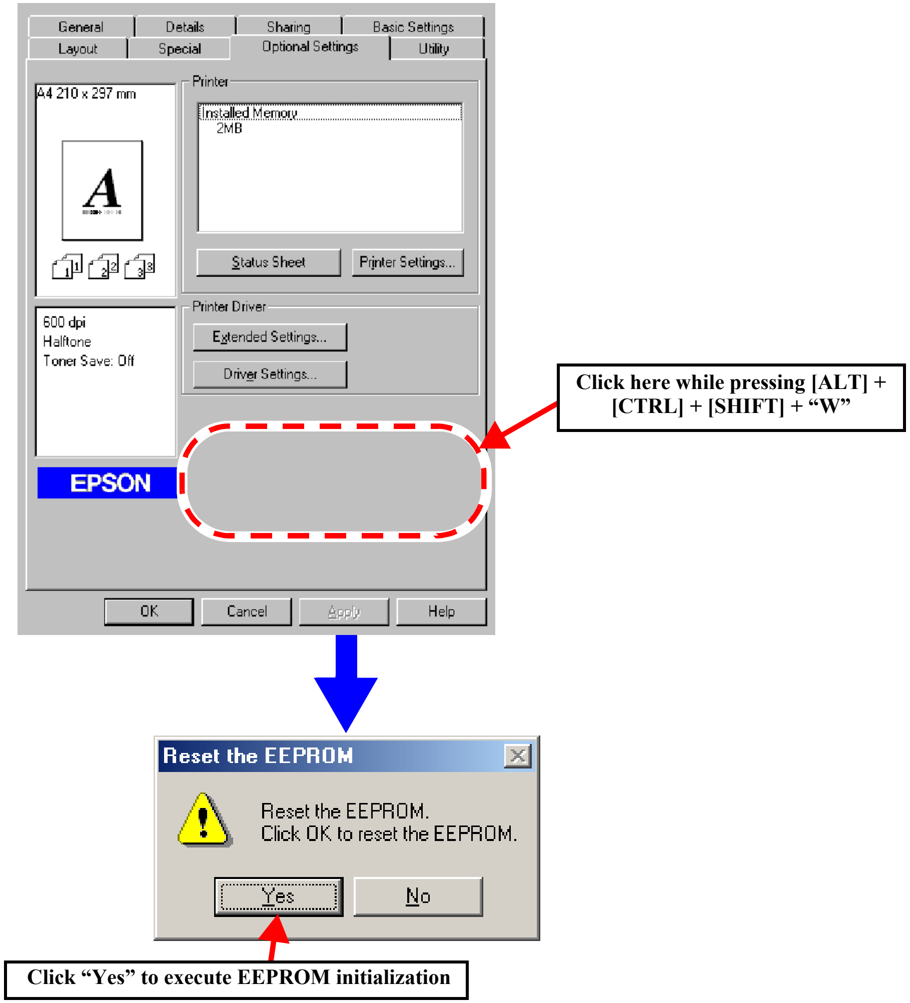
- Total Pages
- Jam Count
- Genuine Toner Change
- Toner Life counter (CSIC)
- Photoreceptor Life counter
- USB ID
- Registration position (paper feed direction)
- Non Genuine Toner Change

ADJUSTMENT REQUIRED

After EEPROM initialization, input the USB ID and make the registration adjustment.
For details, refer to *"5.3 Feed Registration Adjustment (p.169)"*.

HOW TO INITIALIZE EEPROM

1. Open the "Optional Settings" of the printer driver property.
2. While pressing the [ALT] + [CTRL] + [SHIFT] + "W" keys together on the keyboard of the personal computer, click any point in the blank area on the screen.
3. On the dialog screen for confirmation, click "Yes" to execute EEPROM initialization.


General
Details
Sharing
Basic Settings
Layout
Special
Optional Settings
Utility
A4 210 x 297 mm
A
Printer
Installed Memory
2MB
Status Sheet
Printer Settings...
600 dpi
Halftone
Toner Save: Off
Printer Driver
Extended Settings...
Driver Settings...
EPSON
OK
Cancel
Apply
Help
Reset the EEPROM
Yes
No

Reset the EEPROM.
Click OK to reset the EEPROM.

Click here while pressing [ALT] + [CTRL] + [SHIFT] + "W"

Click "Yes" to execute EEPROM initialization

Figure 1-21. EEPROM Initialization

1.6.4.2 Printer Adjustment (Hidden Function)

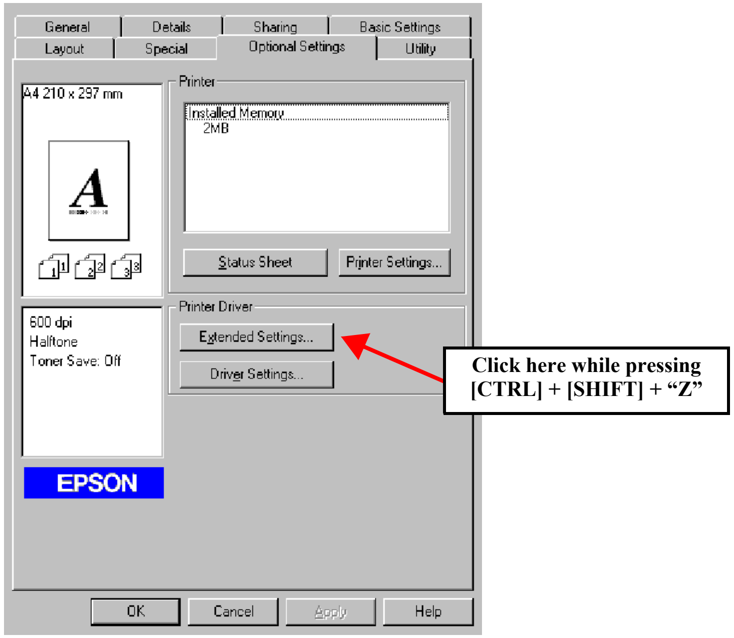
For the following setting items for which the printer stores the settings, you can change the setting by the following procedures:

☐ Humidity:
Use this function to change the transfer voltage when the printing density drops in a high humidity environment.
For details, see *"1.10.3 About the Moist Environment Mode Select (p.60)"*.

☐ Physical Offset:
Adjusts the physical position on the paper where the print begins. (Default: 0)

SETTING PROCEDURE

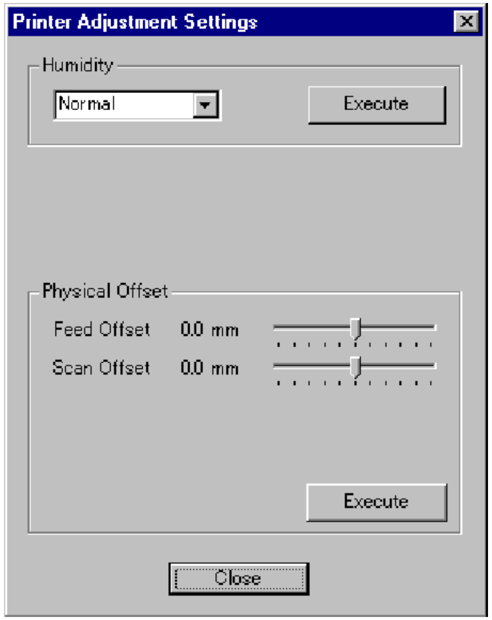
1. Open the "Optional Settings" of the printer driver property.
2. While pressing the [CTRL] + [SHIFT] + [Z] keys together on the keyboard of the personal computer, click the "Extended Settings" button of "Printer Driver".


General
Details
Sharing
Basic Settings
Layout
Special
Optional Settings
Utility
A4 210 x 297 mm
A
Printer
Installed Memory
2MB
Status Sheet
Printer Settings...
600 dpi
Halftone
Toner Save: Off
Printer Driver
Extended Settings...
Driver Settings...
EPSON
OK
Cancel
Apply
Help

Click here while pressing [CTRL] + [SHIFT] + "Z"

Figure 1-22. Printer Adjustment Menu

3. On the screen of the printer adjustment window (hidden window), change the setting value for the appropriate item.
4. After changing the setting value, click the [Execute] button of the printer driver to finalize the setting.


Printer Adjustment Settings
Humidity
Execute
Physical Offset
Execute
Close

Humidity: Normal

Feed Offset 0.0 mm

Scan Offset 0.0 mm

Figure 1-23. Printer Adjustment Window

1.7 RAM Expansion

When EPL-6200 runs out of memory, the Memory LED flashes or lights up.
In this case, you have to mount expanded RAM (RAM DIMM).

This problem may be solved by taking appropriate ones of the following measures:

- Reducing the resolution.
- Select “Halftone” when using Enhanced MicroGray.
- Reducing the receiving buffer size to “Minimum”.
- Use only one interface and set “Off” for other interfaces.

The only way to definitely avoid memory shortages is to install more memory.
(Commercially available SDRAM DIMM for PCs: 90 pins, 32-bit without SPD)

CHECK POINT

With EPL-6200L, RAM cannot be expanded (fized to standard RAM size : 2MB).
However, EPL-6200L can print most types of print job with the standard RAM; by employing a high efficiency data compression algorithm and a hardware accelerated data expansion function.

1.8 System Requirements (Only for EPL-6200L)

The minimum system configuration and recommended system configuration when using EPL-6200L are shown in Figure 1-56 *(p.57)* and Figure 1-57 *(p.57)*.

Table 1-56. Windows

Windows	Minimum [*1]	Recommended [*1]
CPU	Pentium	←
Clock	133MHz	233MHz or more
Memory	16MB	64MB or more
Interface	IEEE1284 Parallel Standard USB [*2]	←
OS	Windows 95/98/Me/XP Windows NT 4.0 Windows 2000	←

Note “*1”: Exception: The requirement given here does not apply to the case where the minimum configuration required by each OS or application is higher than specified above.

“*2”: Limited to PC's who support the USB as standard equipment. Operation is not guaranteed with a USB port installed in an expansion slot. Connection through a device that switches the interface, such as a Parallel - USB converter, is not covered by the warranty. When connecting through a USB port, operation under Windows 95 is not covered by the warranty.

Table 1-57. Mac

Mac	Minimum	Recommended
Machine	Power Mac G3 with standard USB or iMac iBook	←
Clock	233MHz	←
Memory	32MB	64MB
Interface	Standard USB	←
OS	Mac OS 8.6 or later, 9.X, 10.1.2 or later	←

1.9 Paper Feed Specifications (Only for EPL-6200L)

1.9.1 Paper Size

The following three types of information related to paper sizes are available.

User setting size: Paper sizes that the user specifies on the printer driver.

<Supported paper sizes>
A4, A5, B5, LT, HLT, LGL, GLT, GLG, EXE, F4, MON, C10, DL, C5, C6, IB5, User defined size

Printer paper size: Paper sizes for the MP Tray that the printer recognizes is stored in EEPROM.

MP Tray paper size: A size of paper that is loaded in the MP Tray and is actually fed.

The Printer paper size is changed or determined as follows.

When the power to the printer is turned on:
Undefined.

After ejecting paper: In the case where the User setting size is a standard size
When the Check Paper Size error does not occur
→ User setting size.
When the Check Paper Size error occurs → Undefined.

In the case where User setting size is User defined size:
No modification is added to the paper size.

1.9.2 Paper Feed Specifications

Table 1-58. Paper Feed Specifications

Items	Specifications
Methods of detecting the Paper Set error	The printer detects the error when the Printer paper size differs from the User setting size (red LED blinks). However, this error does not occur if the User setting size is other than standard sizes (User defined size) or the Printer paper size is undefined.
Methods of detecting the Check Paper Size (warning)	The printer detects the error when the User setting size differs from the MP Tray paper size. However, when the User setting size is other than standard sizes (User defined size), this error is not detected. Other exceptions: see Check Paper Size of "Details of Warning Status and Processing" *(p.53)*.

NOTE: *Refer to "1.9.3 Case List (p.59)"*

1.9.3 Case List

The table below shows a case list of paper feed specifications for each paper size.

Table 1-59. Case List

User setting size A	Printer paper size B	MP Tray paper size C	Relation between B and C	Paper Set error	Check Paper Size error	Printer paper size after printing
User defined size	Standard	-	-	Does not occur	Does not occur	B: No resizing
	Undefined			Does not occur	Does not occur	Undefined (no resizing)
Standard paper size	A = B	A = C	(B = C)	Does not occur	Does not occur	B: No resizing
	A not = B		(B not = C)	Occurs	Does not occur	A
	Undefined		-	Does not occur	Does not occur	Undefined (no resizing)
	A = B	A not = C	(B not = C)	Does not occur	Occurs	Undefined
			B=C	Occurs	Occurs	Undefined
	A not = B		B not = C	Occurs	Occurs	Undefined
	Undefined		-	Does not occur	Occurs	Undefined

NOTE 1: *"-" means "Don't care".*

2: *The User setting size (A) and the Printer paper size (B) determine whether the Paper Set error occurs or not.*

3: *The User setting size (A) and the MP Tray paper size (C) determine whether the Check Paper Size error occurs or not.*

4: *Differences between the Printer paper size (B) and the MP Tray paper size (C) do not influence each error occurrence.*

5: *Other exceptions: See Check Paper Size of* "Details of Warning Status and Processing *(p.53)"*.

1.9.4 Special Notes

☐ When the User defined size is specified for the User setting size, the Check Paper Size error does not occur.

☐ When the Printer paper size is undefined, the Check Paper Size error occurs in some cases.

1.10 Notes on Operation

1.10.1 Power Off (EPL-6200)

EPL-6200 incorporates an internal non-volatile memory (EEPROM).

If the power to the printer is turned off during the process of writing in non-volatile memory, the successful writing in the non-volatile memory cannot be guaranteed. Therefore, the next time the printer is turned on, panel settings may be initialized or a service call error may occur.

The non-volatile memory saves the function settings, and the following cases are those in which the memory is rewritten, and therefore the printer should not be powered off:

- After the printer is powered on, until the Ready LED lights up.
- While the printer is printing.
  (While the paper feed motor is operating.)
- While the Data LED is flashing or lit.
  To stop the printer, either put it off line or carry out All Print Job Data Cancel.

1.10.2 Caution About Hot Parts (EPL-6200/EPL-6200L)

The fuser unit inside the printer is heated to high temperatures, once the printer cover is opened to clear paper jam or for some reasons, take care not to touch the fuser unit.

1.10.3 About the Moist Environment Mode Select

This is a switch that operates to lower the print density in a high humidity environment. Ordinarily it does not operate.

Use this switch only in cases where the above special environmental conditions exist. When the use environment returns to normal environmental conditions, it is necessary to return it to the original setting immediately.

SETTING PROCEDURE

1. Open the printer driver on the personal computer.
2. Open the “Optional Settings” page.
3. Click the “Extended Settings” button while holding down [ALT] + [CTRL] + [Z] keys.

NOTE: *For details, see “1.6.4 Special Operation (EPL-6200L) (p.54)”.*

CAUTION !

- **This function, a hidden function, must not be opened to users.**
- **This setting can be made by a serviceman in specific cases where no other measure hardly can cope with the problem since the user environment is highly humid.**

CHECK POINT ✓

Print quality is not guaranteed if the printer is used with the high-humidity environment setting in normal environment.

1.11 Status Sheet

<EPL-6200>

A sample of the Status Sheet is shown at right.

The following information is printed at bottom left in the order of 1) to 8):

1). IA followed by firmware version shown in the DDYM format
For M (month), “A” represents October, “B” November and “C” December

2). Negotiation result of IEEE1284
e: ECP, n: Nibble, or none: Compatibility or not connected

3). Device type of code ROM
*: Flash or none: Mask

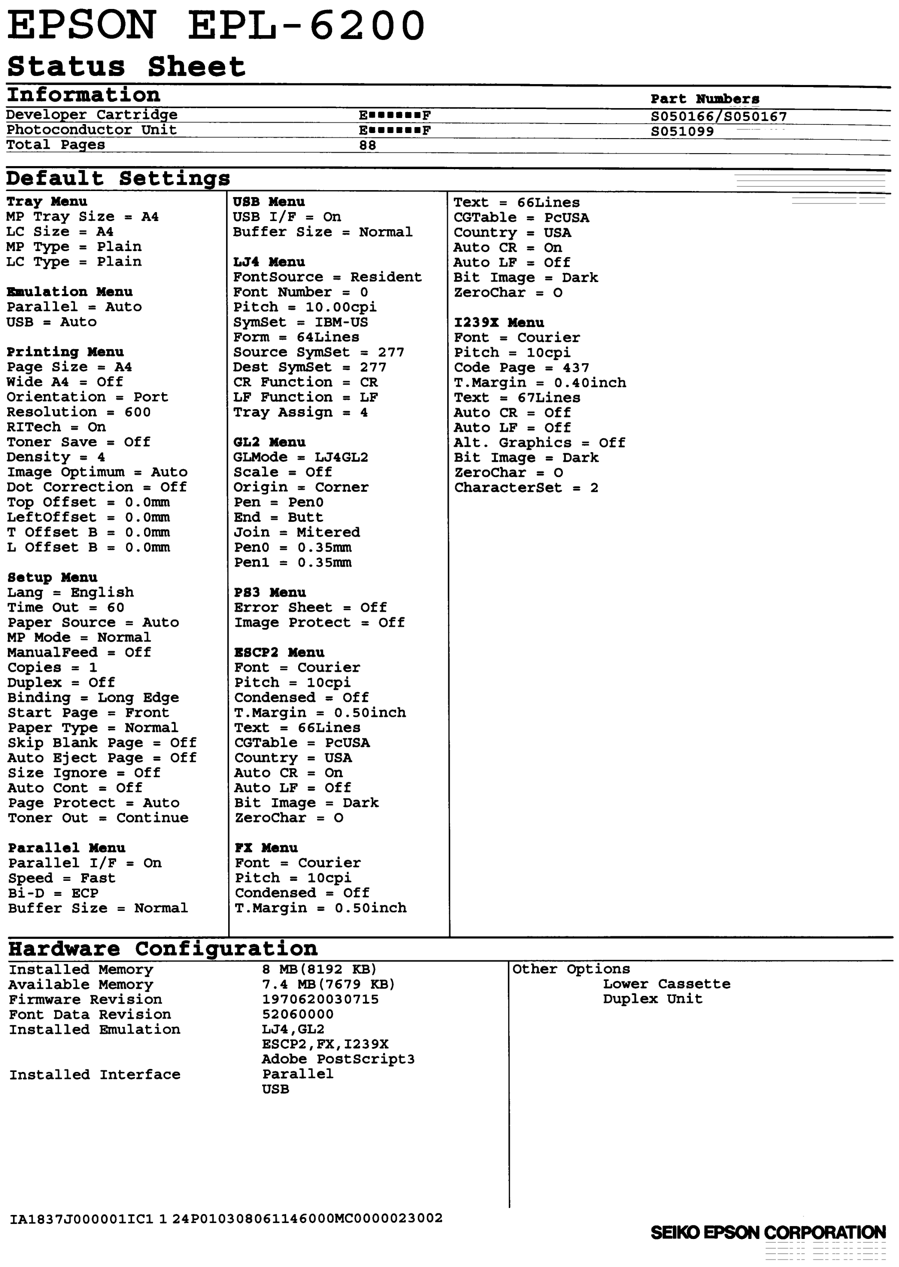
4). 6-digit number indicating the number of times a jam has occurred
JXXXXXX

5). The number of times the Developer Cartridge (toner cartridge) was replaced: “ICXXX YYY”
The number of digits depends on the replacement count.
X: The number of times the genuine Developer Cartridge (toner cartridge) was replaced with a new one. Counting is continued until a maximum of 999 new cartridges are installed. The Developer Cartridge that has been installed in any printer once is not regarded to be a new one even if it has never been used for printing.
Y: The number of times the non-genuine Developer Cartridge was replaced with a new one.

6). USB ID (24PXXXXXXXXXXXXXXX)

7). The latest connection status of USB communicate mode
F: FS, or none: no connection with USB

8). 10-digit number headed by MC, representing the Mechanical Controller version of the engine



```
EPSON EPL-6200
Status Sheet
Information                                                     Part Numbers
Developer Cartridge                    E■■■■■■F                 S050166/S050167
Photoconductor Unit                    E■■■■■■F                 S051099
Total Pages                            88

Default Settings
Tray Menu               USB Menu               Text = 66Lines
MP Tray Size = A4       USB I/F = On           CGTable = PcUSA
LC Size = A4            Buffer Size = Normal   Country = USA
MP Type = Plain                                Auto CR = On
LC Type = Plain         LJ4 Menu               Auto LF = Off
                        FontSource = Resident  Bit Image = Dark
Emulation Menu          Font Number = 0        ZeroChar = O
Parallel = Auto         Pitch = 10.00cpi
USB = Auto              SymSet = IBM-US        I239X Menu
                        Form = 64Lines         Font = Courier
Printing Menu           Source SymSet = 277    Pitch = 10cpi
Page Size = A4          Dest SymSet = 277      Code Page = 437
Wide A4 = Off           CR Function = CR       T.Margin = 0.40inch
Orientation = Port      LF Function = LF       Text = 67Lines
Resolution = 600        Tray Assign = 4        Auto CR = Off
RITech = On                                    Auto LF = Off
Toner Save = Off        GL2 Menu               Alt. Graphics = Off
Density = 4             GLMode = LJ4GL2        Bit Image = Dark
Image Optimum = Auto    Scale = Off            ZeroChar = O
Dot Correction = Off    Origin = Corner        CharacterSet = 2
Top Offset = 0.0mm      Pen = Pen0
LeftOffset = 0.0mm      End = Butt
T Offset B = 0.0mm      Join = Mitered
L Offset B = 0.0mm      Pen0 = 0.35mm
                        Pen1 = 0.35mm
Setup Menu
Lang = English          PS3 Menu
Time Out = 60           Error Sheet = Off
Paper Source = Auto     Image Protect = Off
MP Mode = Normal
ManualFeed = Off        ESCP2 Menu
Copies = 1              Font = Courier
Duplex = Off            Pitch = 10cpi
Binding = Long Edge     Condensed = Off
Start Page = Front      T.Margin = 0.50inch
Paper Type = Normal     Text = 66Lines
Skip Blank Page = Off   CGTable = PcUSA
Auto Eject Page = Off   Country = USA
Size Ignore = Off       Auto CR = On
Auto Cont = Off         Auto LF = Off
Page Protect = Auto     Bit Image = Dark
Toner Out = Continue    ZeroChar = O

Parallel Menu           FX Menu
Parallel I/F = On       Font = Courier
Speed = Fast            Pitch = 10cpi
Bi-D = ECP              Condensed = Off
Buffer Size = Normal    T.Margin = 0.50inch

Hardware Configuration
Installed Memory             8 MB(8192 KB)        Other Options
Available Memory             7.4 MB(7679 KB)                Lower Cassette
Firmware Revision            1970620030715                  Duplex Unit
Font Data Revision           52060000
Installed Emulation          LJ4,GL2
                             ESCP2,FX,I239X
                             Adobe PostScript3
Installed Interface          Parallel
                             USB

IA1837J000001IC1 1 24P010308061146000MC0000023002
                                                             SEIKO EPSON CORPORATION
```

Notes on the status sheet (a sample) for EPL-6200 are as follows:

Note "*1": Printed only when the relevant optional unit has been installed.

"*2": "Needed Soon" will be shown when the amount of toner remaining is supposed to permit printing for not more than 300 sheets.

"*3": "Needed Soon" will be shown when photoconductor life is 5% or less.

"*4": The following notice is given when non-genuine Developer Cartridge (toner cartridge) has been installed:

Non-genuine cartridge installed.
Using a non-genuine cartridge may affect
print quality.
Genuine EPSON cartridge recommended.

"*5": Names and Part Numbers of consumables indicated at Information:

Nme of Consumable	Part Numbers
Developer Cartridge	S050166/S050167 Note) S050166: 6K, S050167: 3K
Photoconductor Unit	S051099

<EPL-6200L>

A sample of the Status Sheet is shown at right.

The following information is printed at bottom left.

NOTE: *A space is put in each item.*

IAXXXX	Controller firmware date. XXXX=ddym About the m (month), they are shown as below. Oct. is A, Nov. is B and Dec. is C.
JXXXXX	Jam counter (the number of digits is five)
ICX Y	X: Counter of changing of Developer Cartridge (toner cartridge). Y: Counter of changing of non-genuine Developer Cartridge (The number of digits depends on the count.)
MCXXXXXX	Engine Firmware version
23PXXXXXXXXXXXXXX	USB ID

Notes on the status sheet (a sample) shown at right are as follows:

Note "*1": "Needed Soon" will be shown when toner counter is 10% or less of 3,000-sheet capacity.

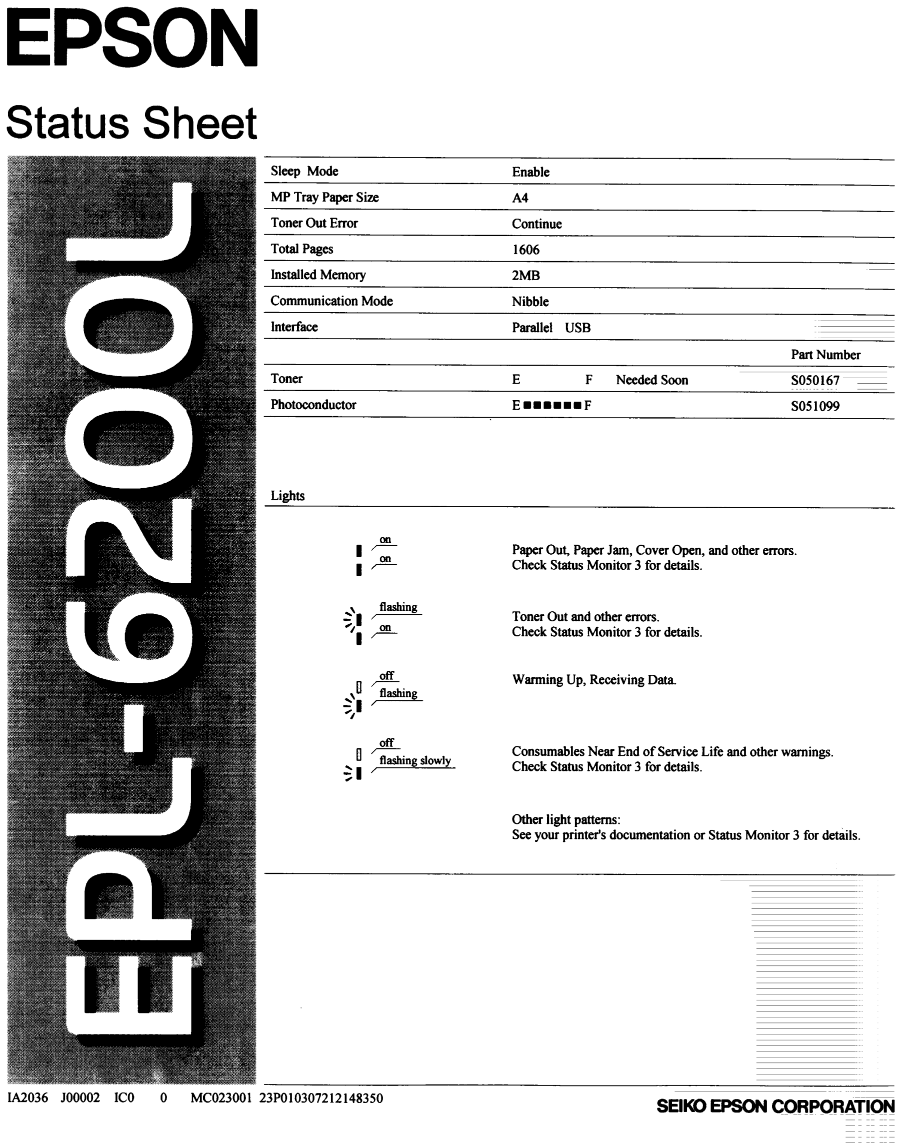
"*2": "Needed Soon" will be shown when photoconductor life is 5% or less.

"*3": The following notice is given when non-genuine Developer Cartridge (toner cartridge) has been installed:
Non-genuine cartridge installed. Using a non-genuine cartridge may affect print quality.
Genuine EPSON cartridge recommended.

NOTE 1: *Developer Cartridge (toner cartridge) model and toner capacity: S050167: 3K*

2: *Photoconductor Unit model: S051099*

3: *Toner remaining amount at 6 levels, Photoconductor life at 6 levels*



EPSON

Status Sheet

EPL-6200L

Sleep Mode	Enable		
MP Tray Paper Size	A4		
Toner Out Error	Continue		
Total Pages	1606		
Installed Memory	2MB		
Communication Mode	Nibble		
Interface	Parallel USB		
			Part Number
Toner	E F	Needed Soon	S050167
Photoconductor	E ■■■■■■ F		S051099

Lights

on on	Paper Out, Paper Jam, Cover Open, and other errors. Check Status Monitor 3 for details.
flashing on	Toner Out and other errors. Check Status Monitor 3 for details.
off flashing	Warming Up, Receiving Data.
off flashing slowly	Consumables Near End of Service Life and other warnings. Check Status Monitor 3 for details.
	Other light patterns: See your printer's documentation or Status Monitor 3 for details.

IA2036 J00002 IC0 0 MC023001 23P010307212148350

SEIKO EPSON CORPORATION

ENGINE STATUS SHEET (EPL-6200)

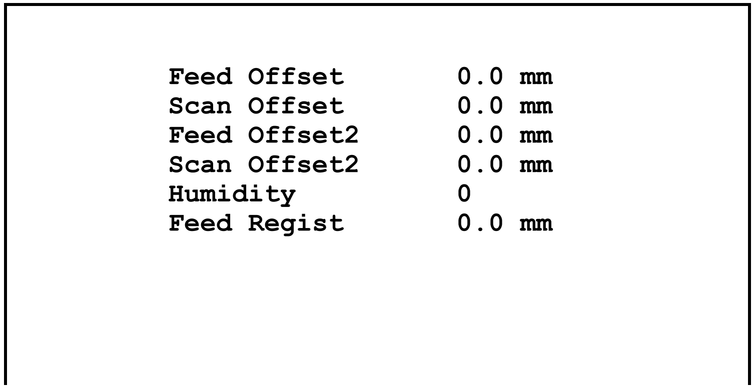
☐ Printing Procedure:

1. Open the printer driver on the personal computer.
2. Open the “Optional Settings” page.
3. Click the “Extended Settings” button while holding down [ALT] + [CTRL] + [Z] keys.

CHECK POINT

This function, a hidden function, must not be opened to users.

Shown below is an example of the engine status sheet of EPL-6200:



```
Feed Offset        0.0 mm
Scan Offset        0.0 mm
Feed Offset2       0.0 mm
Scan Offset2       0.0 mm
Humidity           0
Feed Regist        0.0 mm
```

Figure 1-24. Print Sample of Engine Status Sheet

NOTE *1: The Engine Status Sheet is not localized.*

2: Each numeric value shown in the example is the upper limit of counting.

3: All the values indicated are those that have been set with EJL and stored in EEPROM.

1.12 Ambient Conditions

The ambient conditions to ensure the performance of EPL-6200/EPL-6200L are as follows:

Environment A:	Range of ambient conditions to guarantee image quality and paper feed
Environment B:	Range of ambient conditions to guarantee paper feed
Environment C:	Range of ambient conditions to guarantee paper feed
Environment X:	Range of ambient conditions to guarantee operation

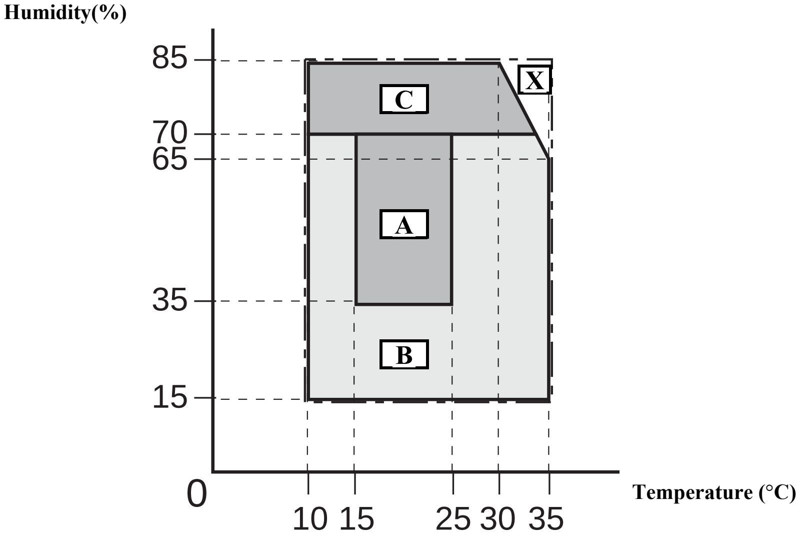


Figure 1-25. Temperature and Humidity Environment

1.13 Differences in Specifications between Intended Markets

1.13.1 Differences in Specifications

Table 1-60. Differences in Specifications between Intended Markets

Model	EPL-6200		LP-2500	EPL-6200L		LP-1400
Intended Markets	**South America and Taiwan**	**Europe, Pacific, China and Korea**	**Japan**	**South America and Taiwan**	**Europe, Pacific, China and Korea**	**Japan**
Resolution /Printing Speed	1200 dpi: 10 ppm, 600/300 dpi: 20 ppm		←	600 dpi: 20 ppm		←
Toner Life	Pre-installed: 3000 sheets Replaced: 3000 sheets or 6000 sheets		Pre-installed: 1500 sheets Replaced: 6000 sheets	Pre-installed: 1500 sheets Replaced: 3000 sheets or 6000 sheets		←
Standard RAM	8 MB		16 MB	2 MB		←
RAM Expansion	136 MB max.		144 MB	None		←
Optional ROM Slot	1 slot (for PS or IPDS option)		None	None		←
Type-B Slot	Supported		←	None		←
Control Panel	3 SW/ 6 LEDs		←	2LEDs		←
Main Board Assy	C533MAIN (WW spec)		C533MAIN (J spec)	C534MAIN (WW spec)		C534MAIN (J spec)
Memory Board Assy	• C533PROG (WW spec) (initial products) • C533PROG-C (WW spec) (by stable production)		• C533PROG (J spec) (initial products) • C533PROG-B (J spec) (by stable production)	-		-
Optional Units	• Lower Cassette Unit • Duplex Unit (Lower cassette required)		• Lower Cassette Unit	-		-
Power Supply Unit	120V system	220V system	100V system	120V system	220V system	100V system

CHECK POINT

There is a difference in jumper setting between "WW spec" and "J spec" of C533MAIN/C534MAIN. Refer to "Jumper Setting" *(p.66)*.

1.13.2 Jumper Setting

☐ C533MAIN (for EPL-6200) is equipped with two resistance jumpers.

	Resistance Jumper	
	R1101	**R1102**
	WW: Letter/A4 Installed: Letter Not installed: A4	WW: No setting
	J: AGFA Font availability Installed: Not available Not installed: Available	J: OEM/Brand Installed: OEM Not installed: Brand
WW spec setting	Not installed (A4)	Not installed (default)
J spec setting	Not installed (Font available)	Not installed (brand)

☐ C534MAIN (for EPL-6200L) is equipped with one resistance jumper.

	Resistance Jumper
	Setting for Markets
	R111
J spec setting	Installed:
WW spec setting	Not installed:

1.14 Notes on Installation of Optional Units

☐ Notes on Installation of Duplex Unit

The Duplex Unit cannot be installed without the Lower Cassette Unit installed.

Install the Duplex Unit by the following procedure.

1. Remove the rear cover of the Lower Cassette Unit. (Two screws)
2. Install the Lower Cassette Unit on the printer body.
3. Install the Duplex Unit.
4. Remove the Connector Cover for the Duplex Unit found at the rear of the printer body, insert the connector into the printer body, and put the Connector Cover back in its position.

- If you would like to remove the Duplex Unit, reverse the procedure of steps 1 to 4 above.

CAUTION !

If you use a wrong procedure, the Duplex Unit may be broken.

CHAPTER

2

OPERATING PRINCIPLES

2.1 Overview

EPL-6200 and EPL-6200L are almost the same in operating principles. However, do not forget that there are some differences in mechanisms between EPL-6200 and EPL-6200L.

2.1.1 EPL-6200 Major Components

Table 2-1. EPL-6200 Major Components

No.	Major Components
1	Print Head Unit
2	Paper Exit Roller
3	Fuser Unit
4	Duplex Unit (Option)
5	Transfer Section
6	Lower Cassette Unit (Option)
7	MP Tray
8	Manual Feed Tray
9	Developer Cartridge (toner cartridge)
10	Photoconductor Unit (Drum Cartridge)

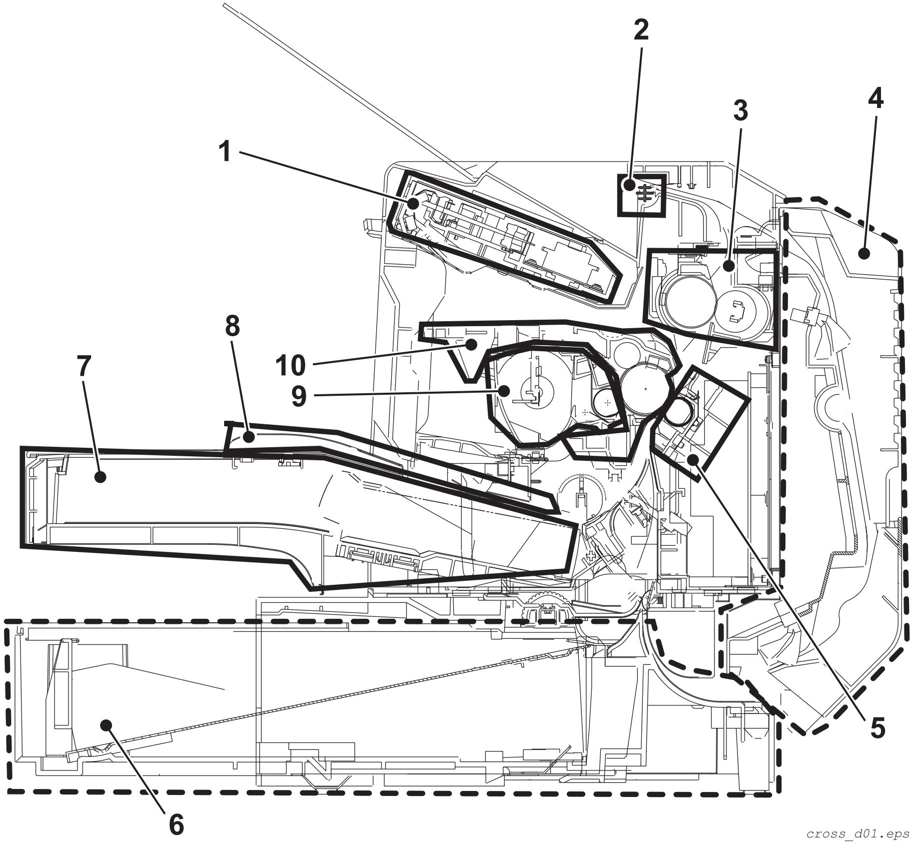


Figure 2-1. Sectional View of Mechanism (EPL-6200)

2.1.2 EPL-6200L Major Components

Table 2-2. EPL-6200L Major Components

	Major Components
1	Print Head Unit
2	Paper Exit Roller
3	Fuser Unit
4	Transfer Section
5	MP tray
6	Developer Cartridge (toner cartridge)
7	Photoconductor Unit (Drum Cartridge)

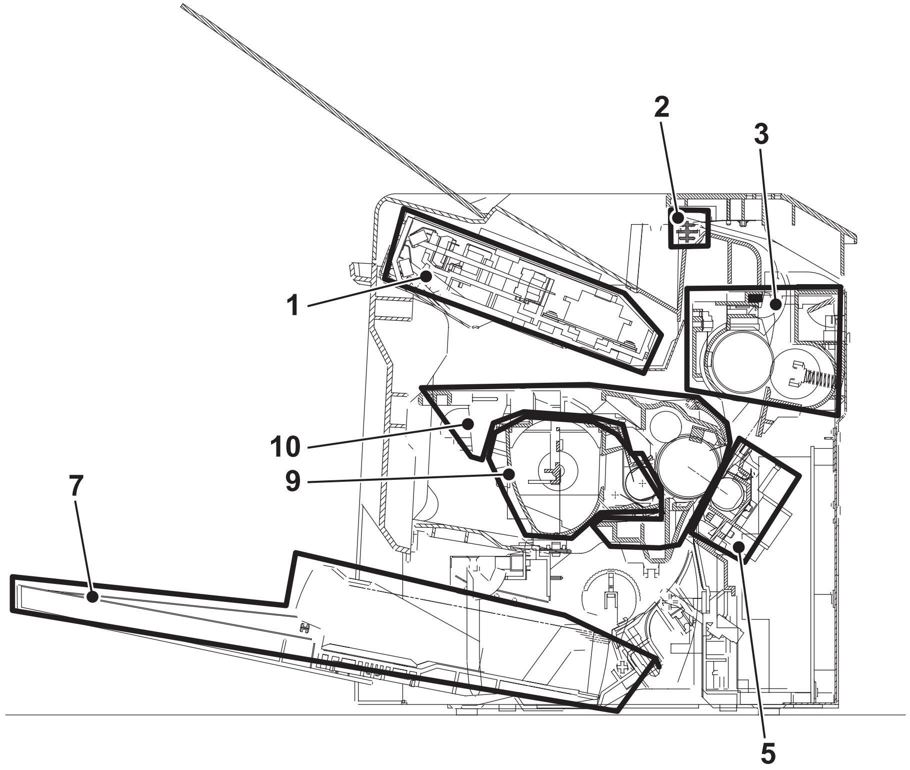


Figure 2-2. Sectional View of Mechanism (EPL-6200L)

2.1.3 Paper Path

<EPL-6200>

- Paper feed is carried out through two ways from the MP Tray (250 sheets) and Manual Feed Tray (1 sheet).
- An optional lower cassette unit (500 sheets) can be installed so that three paper feed methods are available.
- Paper fed by the paper feed roller is carried through transfer roller → fusing roller → paper exit roller and ejected to the Face-down Output Tray.
- For duplex printing, the second side is printed first. Once the sheet has passed the Fuser Unit, the paper path is changed and the paper transport direction is reversed to transport the sheet into the Duplex Unit.
  Since a circulation system is employed, the paper is ejected after printing on the first side has been performed.

<EPL-6200L>

- Paper feed is carried out through one way from the MP Tray (150 sheets).
- Paper once fed by the paper feed roller is carried through transfer roller → fusing roller → paper exit roller and ejected to the Face-down Output Tray.

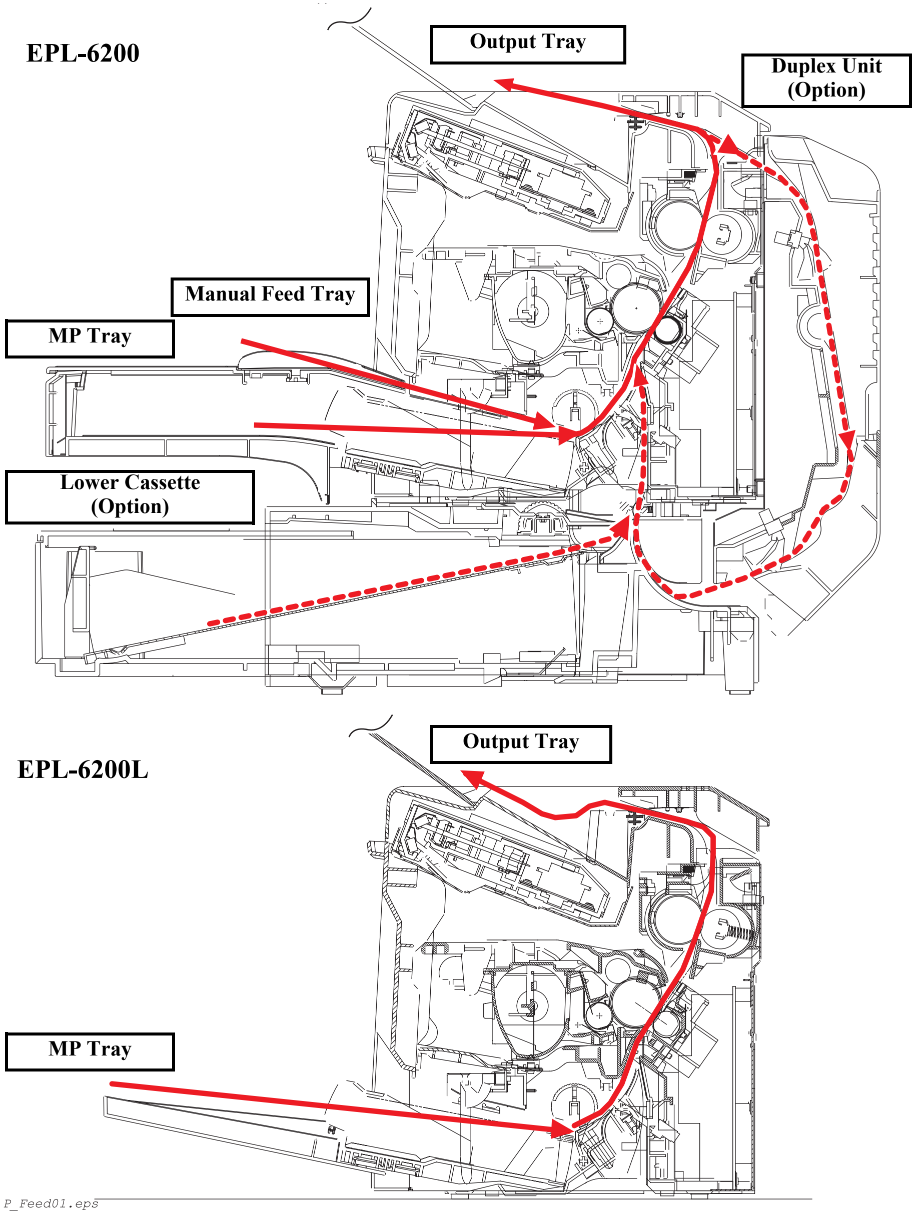

EPL-6200
Output Tray
Duplex Unit (Option)
Manual Feed Tray
MP Tray
Lower Cassette (Option)
EPL-6200L
Output Tray
MP Tray
P_Feed01.eps

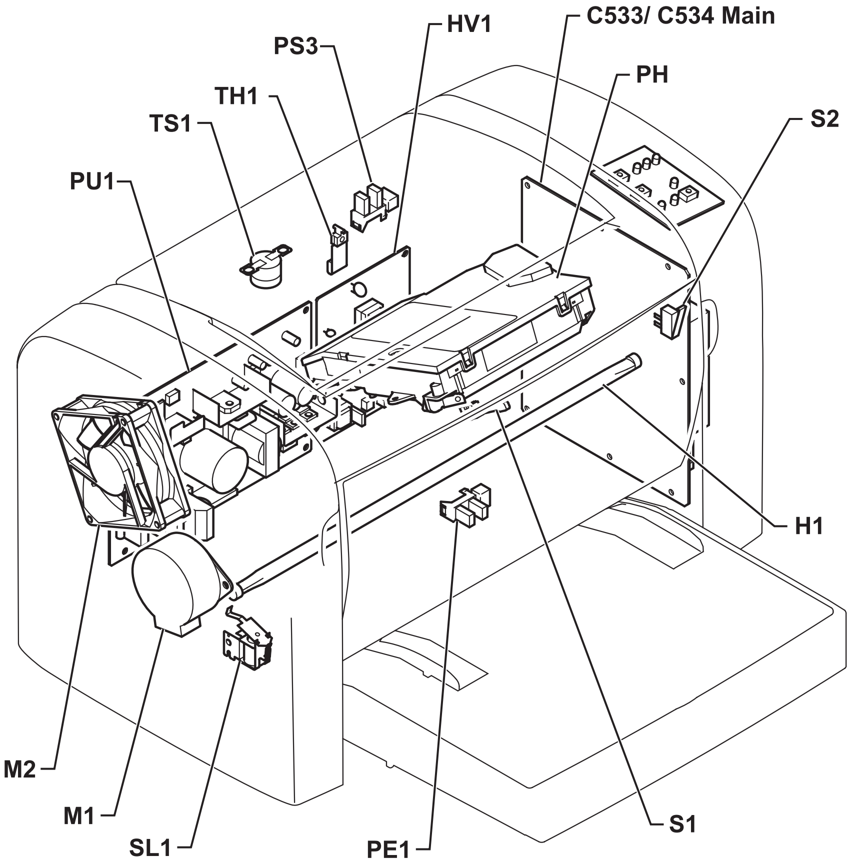
Figure 2-3. Paper Path

2.1.4 Electrical Parts

☐ Printer Body

Table 2-3. Electrical Parts

Symbol	Name
M1	Main Motor
M2	Cooling Fan Motor
H1	Fusing Roller Heater Lamp
TH1	Thermistor
TS1	Thermostat
PH	Print Head Unit
S1	Paper Feed Sensor
S2	Front Cover Switch
PE1	Paper Tray Empty Sensor
PS3	Paper Eject Sensor
SL-1	Paper Feed Solenoid
PU-1	Power Supply Unit
HV-1	High Voltage Unit
C533/C534 Main	Mechanical Control Board



e_parts01.eps

Figure 2-4. Locations of Electrical Parts

2.1.5 Operation Sequence

☐ Printing Start Sequence

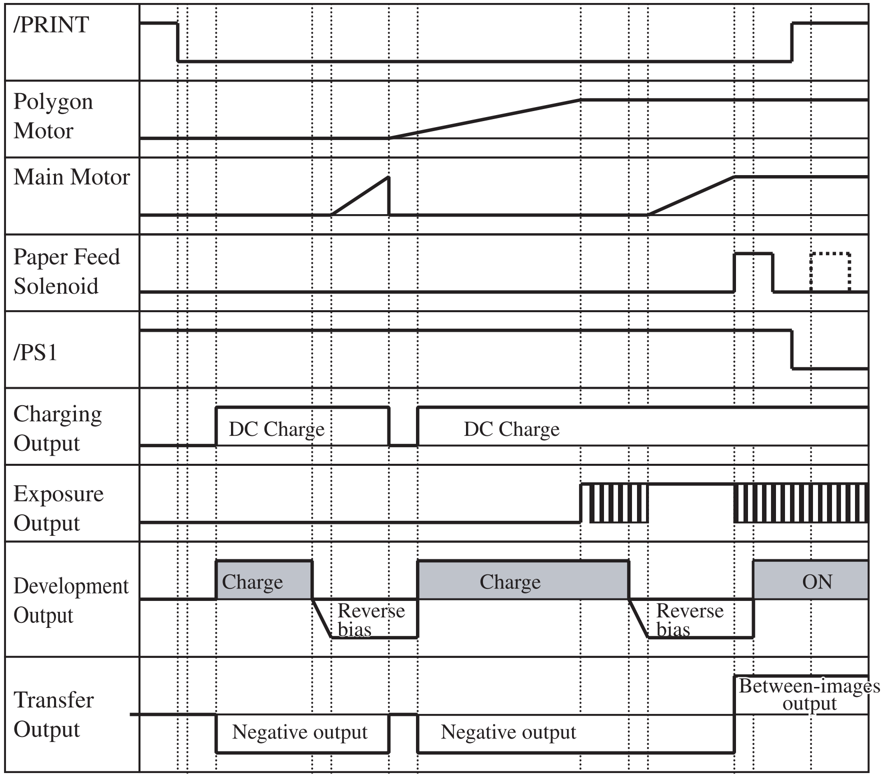

/PRINT
Polygon Motor
Main Motor
Paper Feed Solenoid
/PS1
Charging Output
DC Charge
DC Charge
Exposure Output
Development Output
Charge
Reverse bias
Charge
Reverse bias
ON
Transfer Output
Negative output
Negative output
Between-images output
TimingS01.eps

Figure 2-5. Printing Start Sequence

☐ Printing End Sequence

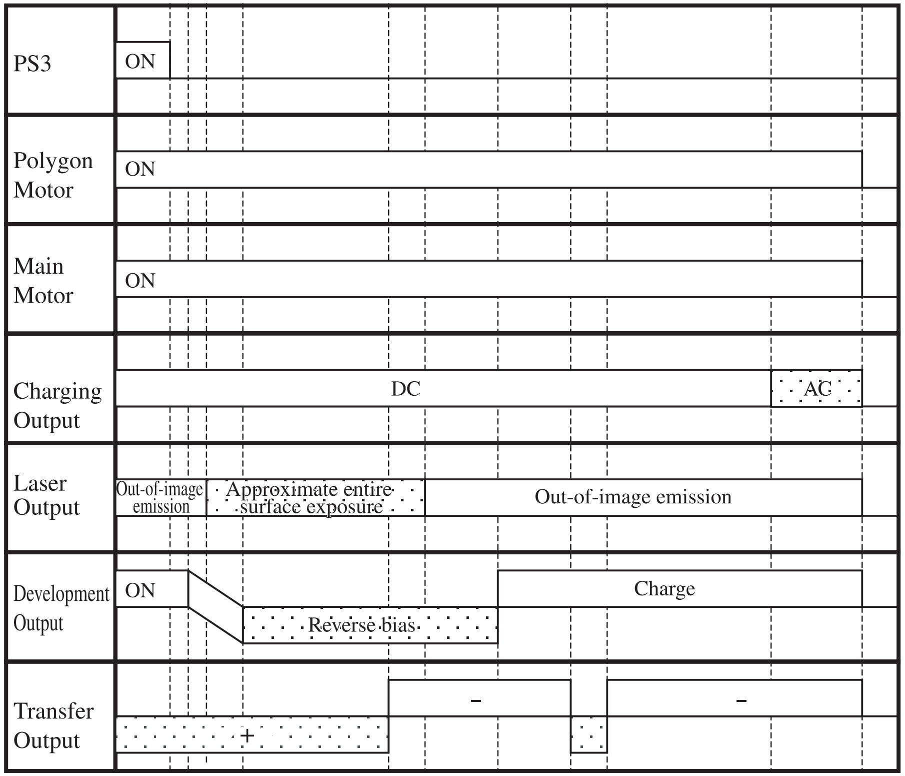

PS3
ON
Polygon Motor
ON
Main Motor
ON
Charging Output
DC
AC
Laser Output
Out-of-image emission
Approximate entire surface exposure
Out-of-image emission
Development Output
ON
Reverse bias
Charge
Transfer Output
+
–
–
TimingS02.eps

Figure 2-6. Printing End Sequence

2.1.6 Various Sensors

Table 2-4. Various Sensors

Unit		Detected Matter	EPL-6200	EPL-6200L	Detecting Method	Refer to
Standard (Printer Body)	Printer Body	Paper jam	○	○	Actuator + photo switch	*p.83*
	Paper Tray	Paper presence	○	X	Automatic detection by sensor	*p.86*
		Paper size	X	X		–
	Developer Cartridge (toner cartridge)	Presence	○	○	CSIC	*p.81*
		New product	○	○	CSIC	
		Remaining amount	○	○	Software counter + CSIC	
		Near end	X	X	Software counter	–
		End	X	X	Software counter	
	Photoconductor Unit (Drum Cartridge)	Presence	X	X		–
		New product	X	X		
		Remaining amount	X	X		
		Near end	X	X	Software counter	
		End	X	X	Software counter	
Optional	Lower Cassette Unit	Installation (detection at power on)	X	-		–
		Unit presence	X	-	Connector connection	
		Paper presence	○	-	Automatic detection by sensor	*p.88*
		Paper size	○	-	Automatic setting by projection on cassette (Cassette for A4 only)	*p.88*
		Cassette mounted/unmounted	○	-	Automatic setting by projection on cassette	

2.2 Description of Mechanisms

2.2.1 Print Head (PH)

2.2.1.1 Entire Constitution

Scanning with the laser beam coming out of the Print Head is performed by the polygon motor. *(See "Figure 2-7")*

2.2.1.2 Exposure Process

- The laser beam from the print head creates an electrostatic latent image on the OPC drum surface. *(See "Figure 2-8")*
- The following control is performed in order to find the appropriate timing to print the image.
  - When the printer receives the PRINT signal, the polygon motor and the main motor operate, and paper feeding is started.
  - Upon passage of a specified period of time after the front end of the fed sheet turns the paper feed sensor ON (TOD signal), the main control board sends the VIDEO signal to the print head, and printing starts.
  - When moving on from the first line to the second line, the print starting position is shifted down by delaying the VIDEO signal sending time
  - The Print Head incorporates the SOS sensor to unify the timing of the laser emission for every line of main scanning.

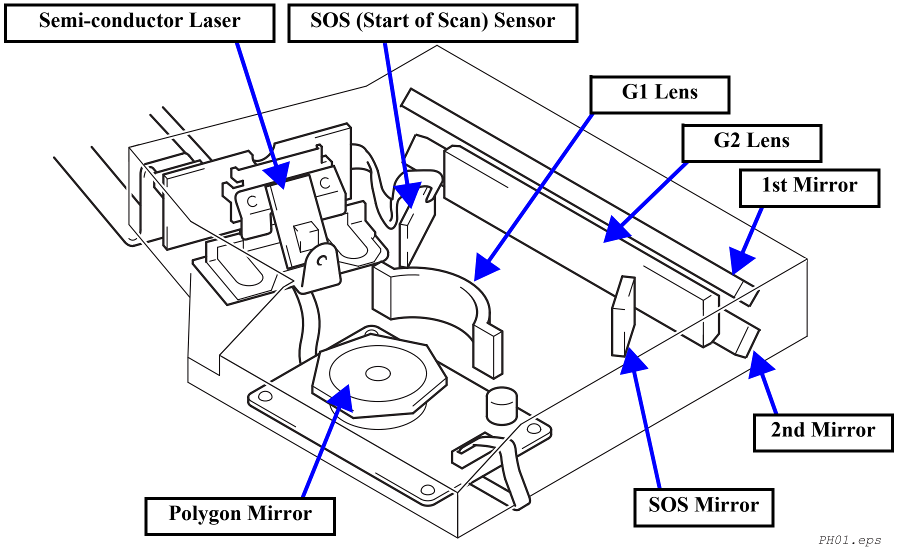

Semi-conductor Laser
SOS (Start of Scan) Sensor
G1 Lens
G2 Lens
1st Mirror
2nd Mirror
SOS Mirror
Polygon Mirror
PH01.eps

Figure 2-7. Print Head Constitution

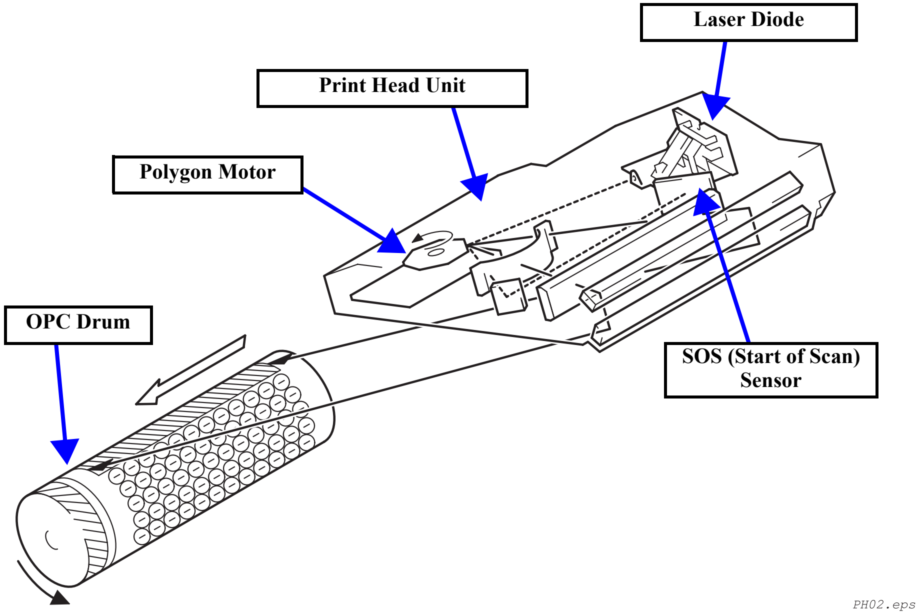

Laser Diode
Print Head Unit
Polygon Motor
OPC Drum
SOS (Start of Scan) Sensor
PH02.eps

Figure 2-8. Exposure Process

2.2.1.3 Laser Emission Timing

- When the Ready signal is detected upon passage of a certain period of time after issue of the printing start signal, the Laser ON signal is output from the Mechanical Control Board. *(See "Figure 2-9")*
- Upon issue of the Laser ON signal, the laser beam is forcibly emitted. The laser beam, via the polygon mirror → G1 lens → SOS mirror, strikes the SOS sensor to issue the SOS signal.
- This SOS signal unifies the timing of the laser emission for every line of main scanning.

2.2.1.4 Laser Emission Area

- Main Scanning Direction *(See "Figure 2-10")*
  - Printing start timing with laser is such that the printing start position is determined by the main scanning printing start signal (/HSYNC) output from the Mechanical Control Board and by the paper width.
  - The laser emission area is determined by the paper size. However, the 4-mm width area at each of right and left edges is a no-image area.
- Sub Scanning Direction
  - Printing start timing with laser is such that the printing start position is determined by the sub scanning printing start signal (/TOD) output from the Mechanical Control Board and by the paper length.
  - The laser emission area is determined by the paper size. However, the 4-mm width area at each of the head and tail edges is a no-image area.

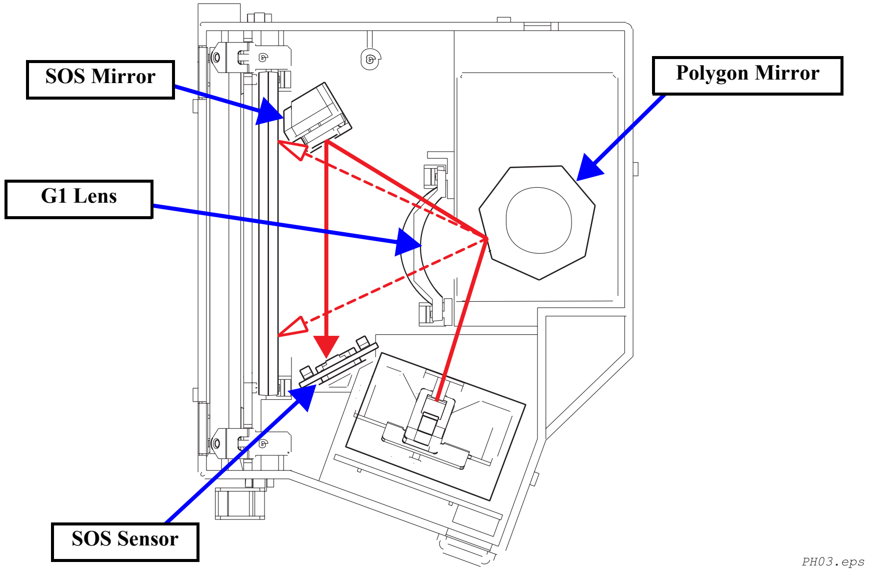


Figure 2-9. Laser Emission Timing

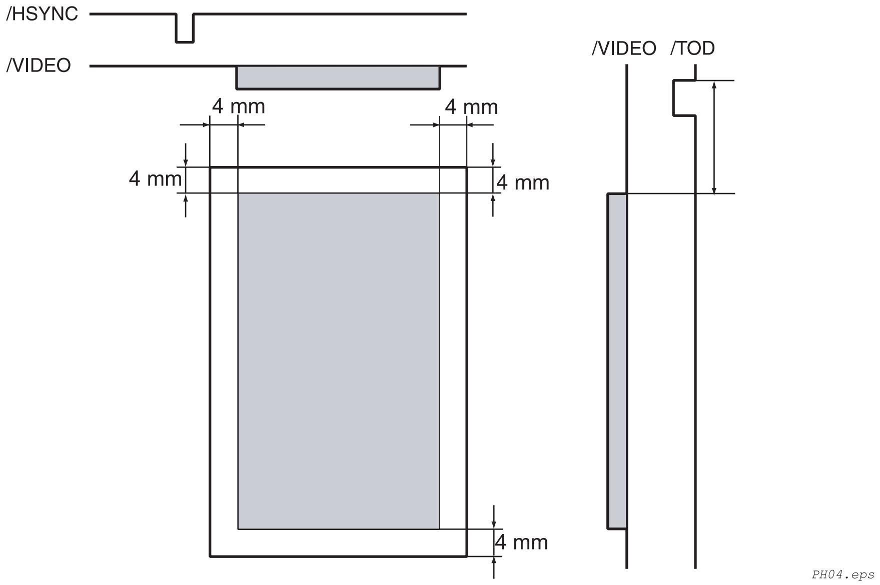


Figure 2-10. Laser Emission Area

2.2.1.5 Cooling inside the Printer

The Cooling Fan Motor discharges the heat emitted by the Print Head Unit to the outside of the printer, thus preventing temperature rise of the Print Head Unit.

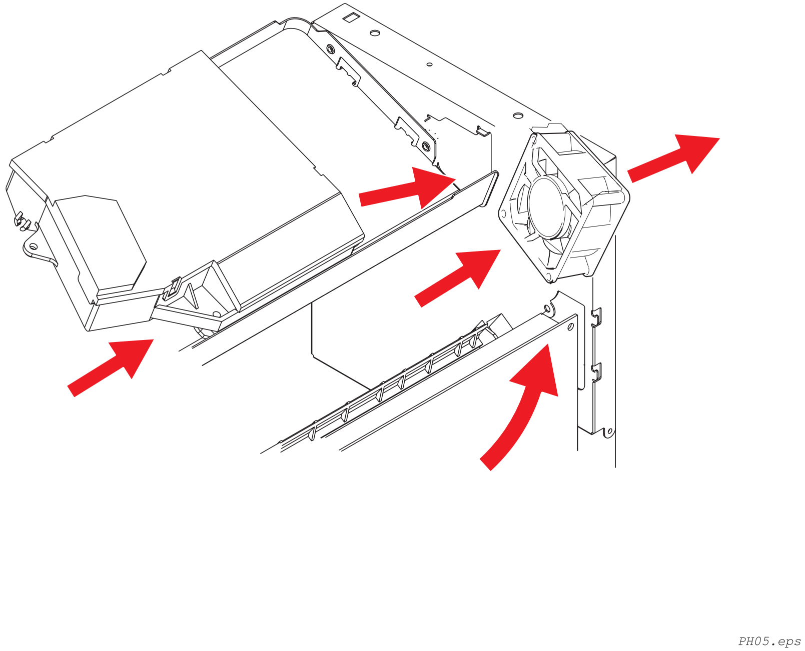
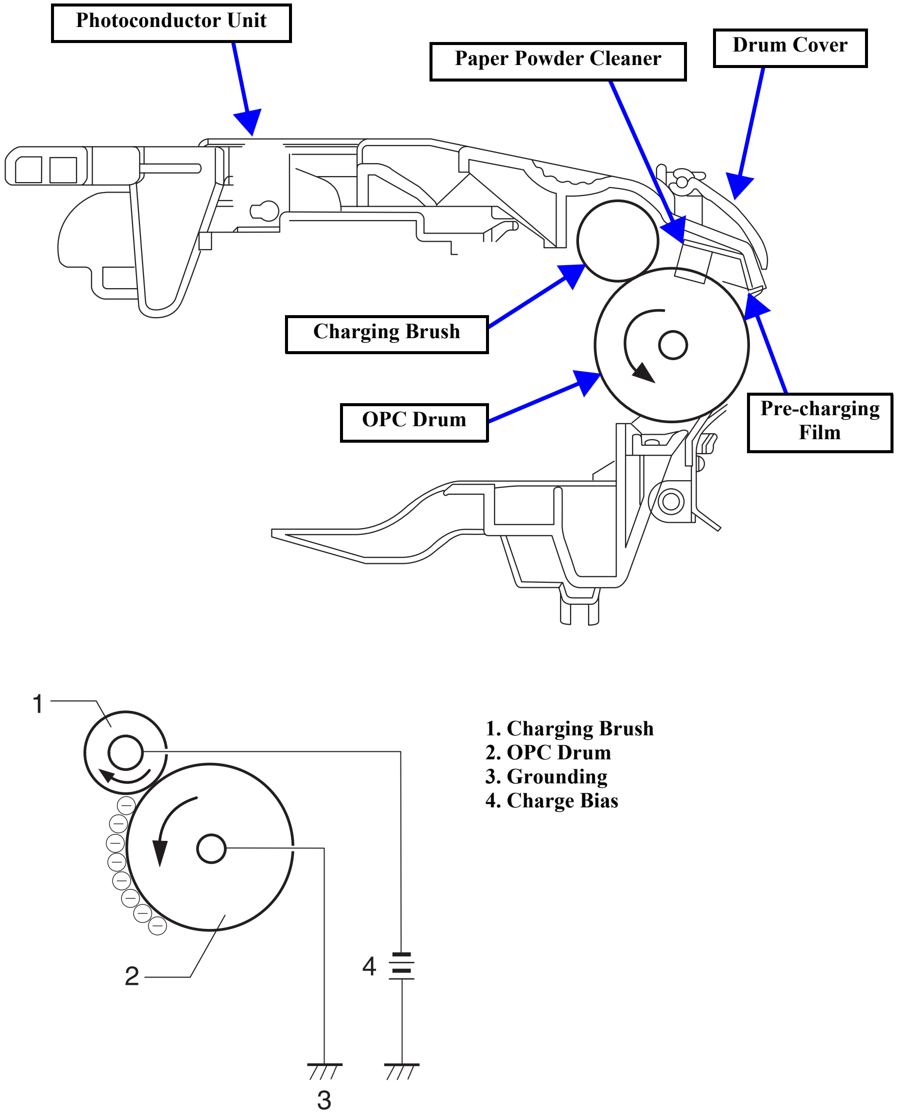


Figure 2-11. Cooling inside the Printer

2.2.2 Charging Process

- Before laser exposure, static electricity is given to the OPC drum (Organic Photoconductor) to charge it.
- The surface of the OPC drum is charged by the rotating brush (charging brush) and pre-charging film.
- Charging by the charging brush and the pre-charging film, by which charge is given directly to the OPC drum, is characterized by generating ozone rarely, requiring a low voltage and excelling in homogeneity and stability of the electric potential.
- The pre-charging film performs preliminary charging before charging with the rotary brush (charging brush) to enhance efficiency of charging.


Photoconductor Unit
Paper Powder Cleaner
Drum Cover
Charging Brush
OPC Drum
Pre-charging Film
1
2
3
4
1. Charging Brush
2. OPC Drum
3. Grounding
4. Charge Bias

Dram01.eps

Figure 2-12. Charging Process

2.2.3 Development Process (Imaging Cartridge)

2.2.3.1 OVERVIEW

The Developer Cartridge and development section are constructed as described below:

- This printer employs one-component FMT (Fine Micro Toning) development method.
- Toner in the Developer Cartridge (toner cartridge) is sent into the toner sending roller area by the toner agitation blade.
- Then the toner, through the resin sleeve, is made to stick to the latent image area produced by exposure to the laser beam on the OPC drum, thus a toner image is formed.
- The Imaging Cartridge consists of the Developer Cartridge (toner cartridge) and the Photoconductor Unit (Drum Cartridge).

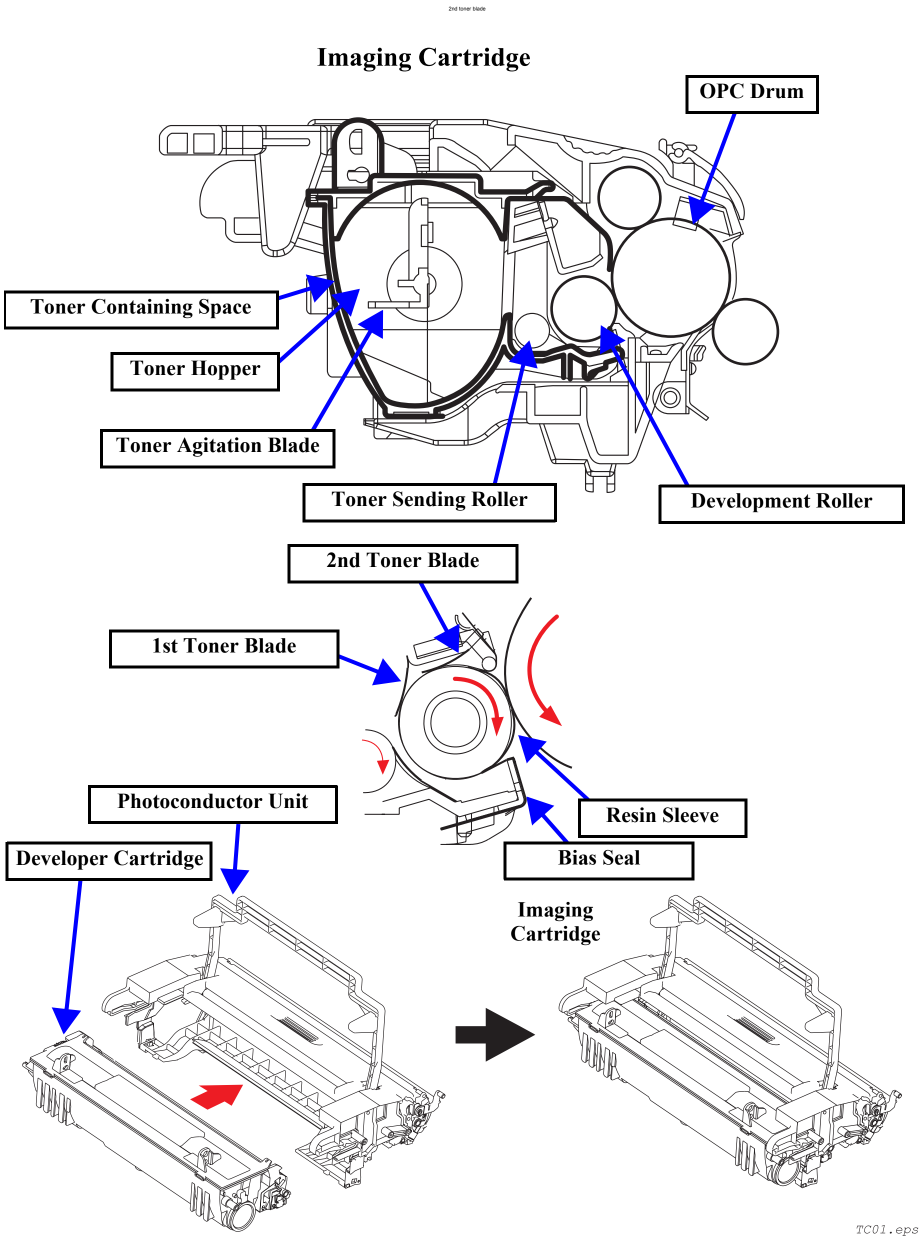

2nd toner blade
Imaging Cartridge
OPC Drum
Toner Containing Space
Toner Hopper
Toner Agitation Blade
Toner Sending Roller
Development Roller
2nd Toner Blade
1st Toner Blade
Photoconductor Unit
Resin Sleeve
Developer Cartridge
Bias Seal
Imaging Cartridge
TC01.eps

Figure 2-13. Development Process (Imaging Cartridge)

2.2.3.2 OPC Drum

- An OPC (Organic Photo Conductor) is used.
- This photoconductor is of a laminate type consisting of a carrier generation layer and an electric charge retaining layer applied onto an aluminum base (cylinder).
  (See "Figure 2-14")

CAUTION

Precautions in Handling:
The organic photoconductor can deteriorate by sensitivity change due to light fatigue if it is exposed to light for an extended period of time. To prevent such deterioration, when the OPC Drum has been taken out of the printer body, cover it with a clean soft cloth to protect it from exposure to light. In handling the Photoconductor Unit, take great care that no dirt adheres to the surface of the photoconductor.

- Grounding of OPC drum:
  The grounding contact of the photoconductor is located in its front inside and always in contact with the shaft of the front plate of the print unit. When the print unit is installed in the printer body, the setting pin of the print unit front plate comes in contact with the front plate of the printer body to achieve grounding. Thus, the electric charge on the photoconductor in the area exposed to light is grounded through the grounding plate, the shaft and the setting pin to the frame. *(See "Figure 2-15")*

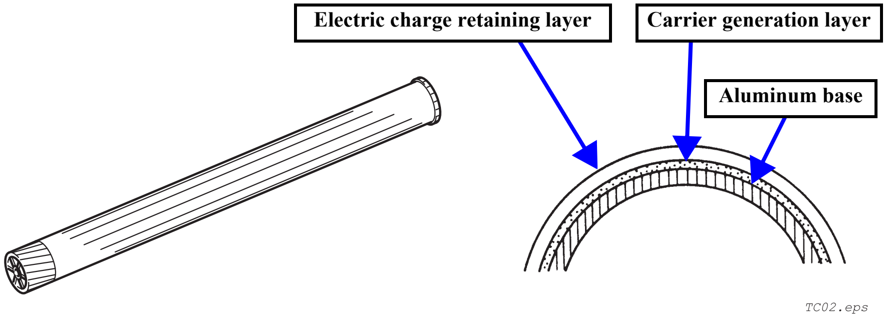


Figure 2-14. OPC Drum

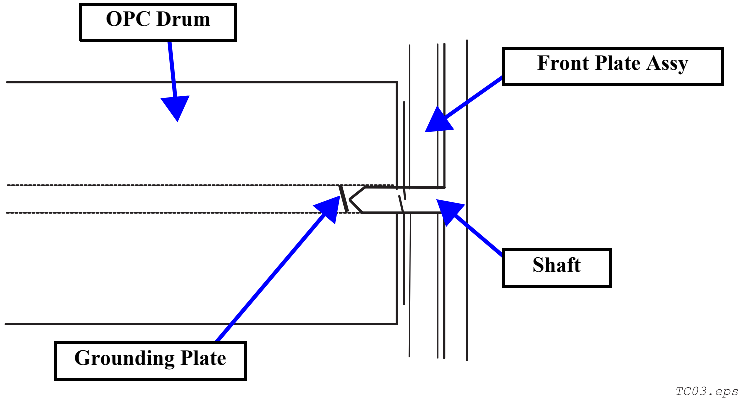


Figure 2-15. Grounding of OPC drum

2.2.3.3 Development Process

☐ Toner in the Developer Cartridge (toner cartridge) is sent into the toner sending roller area by the toner agitation blade.

☐ The toner sending roller transports the toner to the development roller side.

☐ The toner which has been transported onto the development roller forms a uniform thin layer on the development roller by the operation of the 1st toner blade.

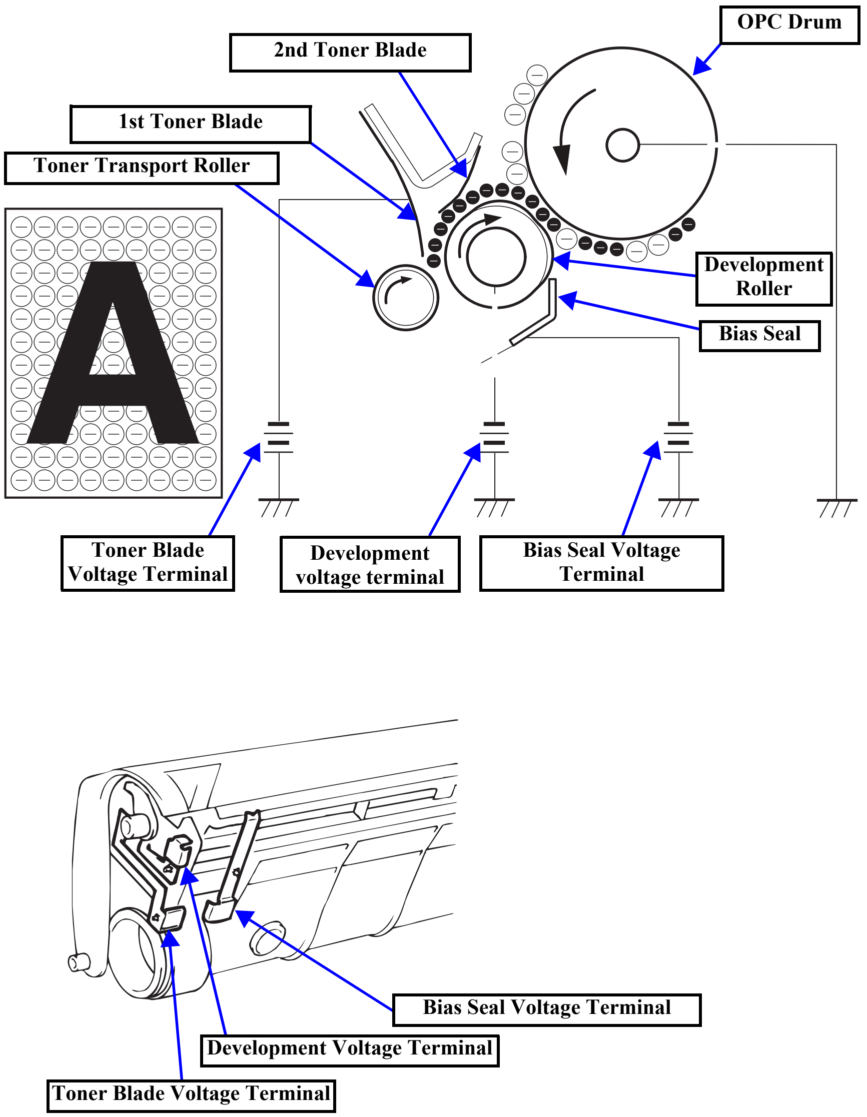
☐ Negative charge is applied to the 2nd toner blade to give negative charge to the toner.

☐ Negative charge is applied to the development roller to keep the toner staying there.

☐ Toner sticks to the area exposed to the laser beam on the OPC drum.

☐ The toner left on the development roller without sticking to the OPC drum is collected into the toner hopper by the operation of the bias seal located under the development roller. To this bias seal, the same bias voltage as is applied to the development roller is applied to prevent toner from dropping.

☐ The development bias voltage is adjusted by feedback control so that the print density is automatically adjusted in the range of seven steps. In addition, reverse bias voltage against the development bias is applied to prevent toner from sticking to the OPC drum before printing start, before preliminary turning of the drum and during preliminary turning.


OPC Drum
2nd Toner Blade
1st Toner Blade
Toner Transport Roller
A
Development Roller
Bias Seal
Toner Blade Voltage Terminal
Development voltage terminal
Bias Seal Voltage Terminal
Bias Seal Voltage Terminal
Development Voltage Terminal
Toner Blade Voltage Terminal

TC04.eps

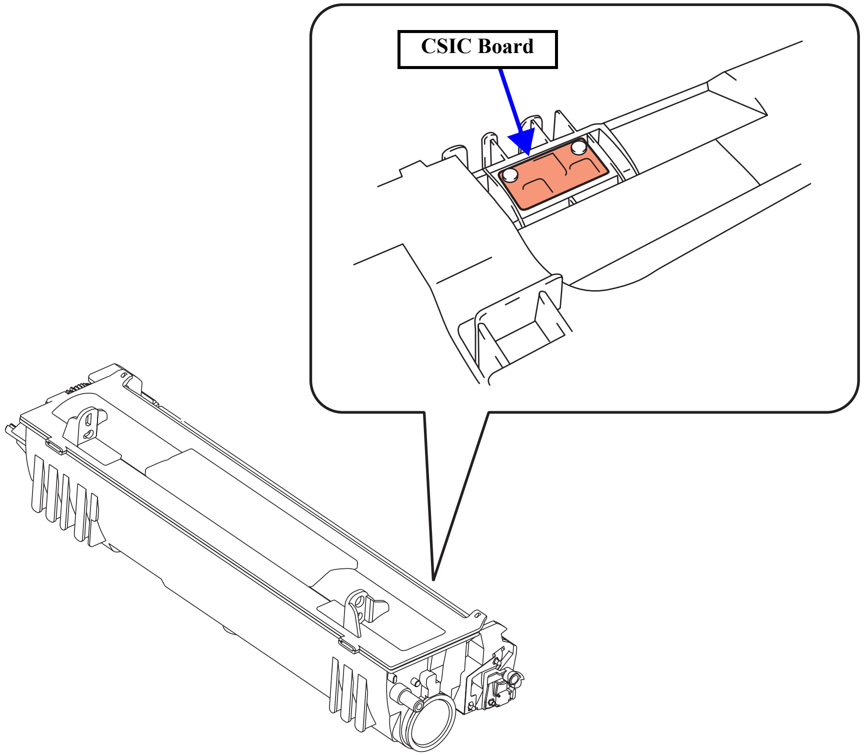
Figure 2-16. Development Process

2.2.3.4 Detection Of Developer Cartridge (toner cartridge)

- ☐ Installation Detection (Presence Detection):
  Installation of the Imaging Cartridge is detected in such a way that its presence/ absence is electrically detected at power off and on or opening and closing of the front cover by the IC chip (CSIC) incorporated in the Developer Cartridge (toner cartridge).
- ☐ Detection of New Cartridge:
  The Developer Cartridge (toner cartridge) is detected to be a new one only at the first installation by the built-in IC chip (CSIC).
- ☐ Detection of Toner Cartridge Near Empty or Toner Cartridge Empty
  - ■ The built-in IC chip (CSIC) detects the amount of toner remaining by counting the dots of laser.
  - ■ With the dots corresponding to one sheet of A4 size printed at 5% of B/W ratio counted one, reaching the predetermined count is detected to be the Toner Cartridge near empty state or Toner Cartridge empty state.

CAUTION

Do not disclose the description of the CSIC chip given above to users.



TC05.eps

Figure 2-17. Detection of Developer Cartridge (toner cartridge)

2.2.4 Transfer Process

☐ Overview

- The image created on the OPC drum in the development process is transferred to the paper.
- Transfer is performed by the roller transfer method using the transfer roller.
- By the roller transfer method, ozone is generated rarely and the transferred image is little dislocated since the paper passes between the drum and the transfer roller all through during printing.
- The transfer roller is cleaned by applying a reversed bias to the transfer roller.
- Cleaning of the transfer roller is carried out at start up of the printer, at printing start, at printing end and at starting after clearing a paper jam.
- The residual electric potential on the paper is removed by the discharge needle.

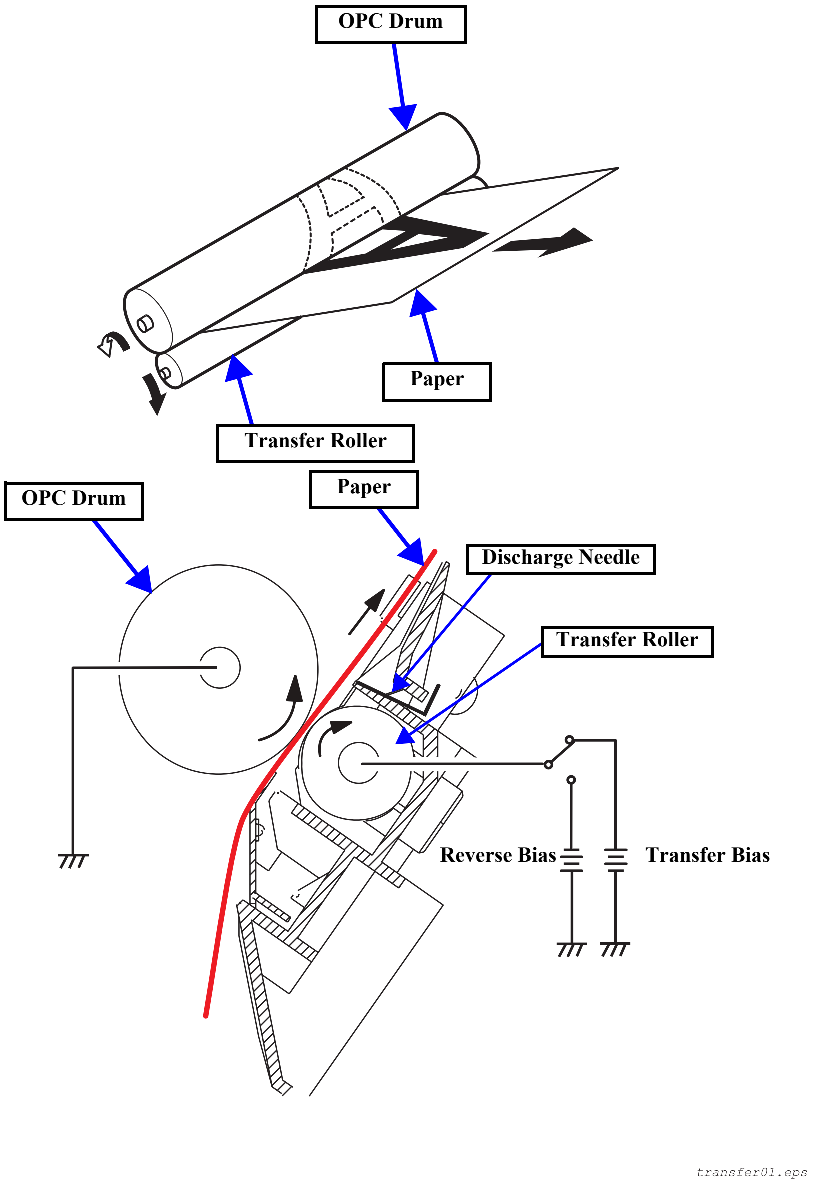

OPC Drum
Paper
Transfer Roller
OPC Drum
Paper
Discharge Needle
Transfer Roller
Reverse Bias
Transfer Bias
transfer01.eps

Figure 2-18. Transfer Process

2.2.5 Fusing Process

2.2.5.1 Overview

☐ In this process, the toner transferred to the paper in the transfer process is fused to the paper.

☐ For fusing, this printer uses the heat roller fusing system. The sheet with toner on passes between the heat roller, which is heated up by the fusing heater lamp, and the pressure roller. During this passage, heat and pressure are applied to permanently fuse the toner to the paper. *(See "Figure 2-15")*

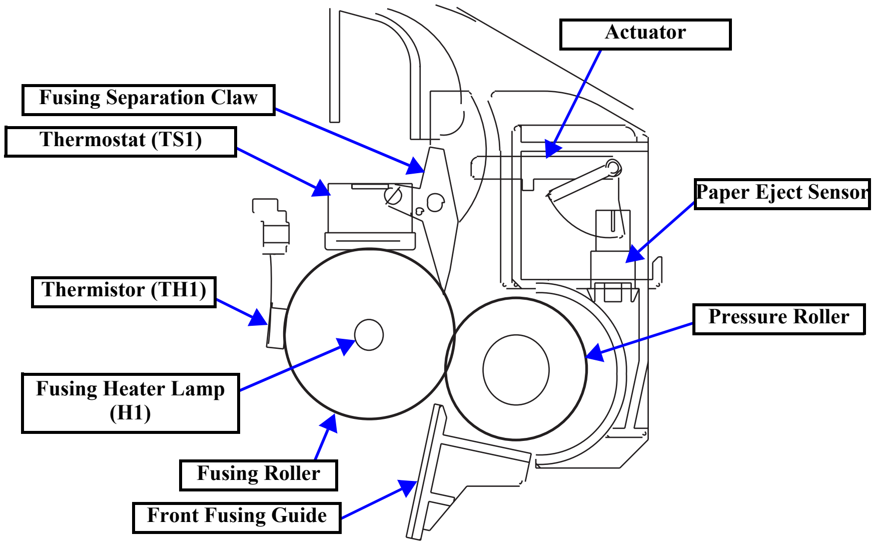


Figure 2-19. Fusing Process

2.2.5.2 Fusing Temperature Control

TEMPERATURE CHANGE

See Figure 2-20 at right and Table 2-5 below for temperature change.

Table 2-5. Temperature Change

		Thermistor Temperature at Temperature Adjustment Start		
		Below 50°C	**50°C~125°C**	**125°C or above**
Mode before Temperature Adjustment	Power OFF	Mode 1	Mode 2	Mode 3
	Mode 1		Mode 1	
	Mode 2		Mode 2	Mode 3
	Mode 3			

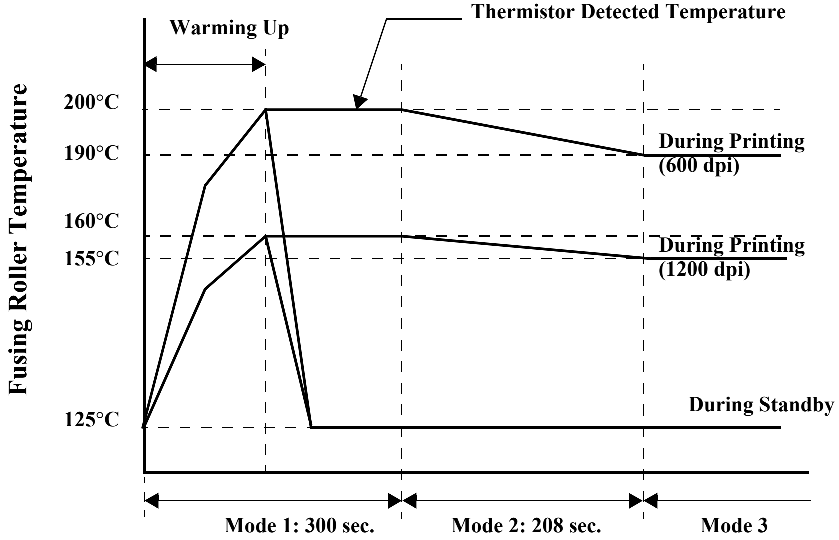


Figure 2-20. Temperature Change

TEMPERATURE ADJUSTMENT CONTROL

☐ During warming up, the fuser temperature is raised up to the predetermined temperature.

☐ Warming up control is carried out at power on, at opening and closing of the front cover and at canceling of Pause mode.

☐ In standby mode, the fuser temperature is kept at 125°C, a little lower than the temperature during printing, to reduce power consumption.

☐ The temperature adjustment mode at restarting of temperature adjustment control (at power on, at opening and closing of the front cover or at canceling of Pause mode) is determined depending on the previous mode and the fuser temperature.

☐ In Pause mode (low power consumption mode), the fusing heater lamp is turned off to reduce power consumption.

TEMPERATURE CONTROL MODE

During printing, the fuser temperature is adjusted along the passage of time counted from completion of warming up.

☐ Mode 1:
Temperature control mode 1 continues for five minutes. However, the temperature adjustment mode 1 that was interrupted once is resumed with the timer counting from the count just before interruption, if the thermistor temperature is 50°C or higher. Upon completion of temperature adjustment mode 1, temperature adjustment mode 2 starts.

☐ Mode 2:
This mode continues for 208 seconds. Once the printing temperature is lowered gradually and has dropped to the printing temperature of temperature adjustment mode 3, mode 2 is ended and temperature adjustment mode 3 is started.

☐ Mode 3:
This mode continues until it is interrupted (for example, the front cover is opened).

PRINTING TEMPERATURE AT EACH TEMPERATURE ADJUSTMENT MODE

Table 2-6. Printing Temperature at Each Temperature Adjustment Mode

		Mode 1	Mode 2	Mode 3
600 dpi	Plain paper	200°C	200°C→190°C	190°C
	Thick paper, Envelopes, Postcards	205°C→215°C		
	Transparencies	195°C	195°C→185°C	185°C
1200 dpi	Plain paper	160°C	160°C→155°C	155°C
	Thick paper, Envelopes, Postcards	165°C→170°C		
	Transparencies	155°C	155°C→150°C	150°C

2.2.6 Paper Feed Mechanism

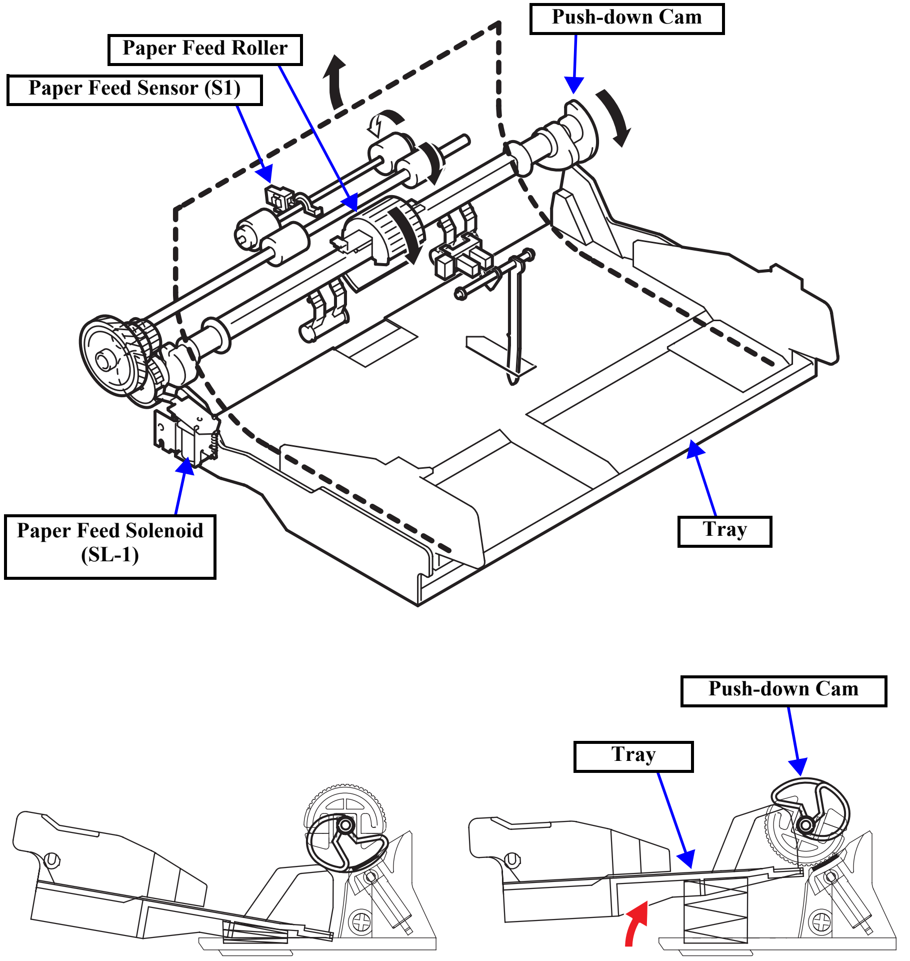
2.2.6.1 MP (Multiple Purpose Paper) Tray

PAPER FEED OPERATION

- ☐ When the paper feed solenoid is turned ON, the driving power from the main motor is transmitted to the paper feed roller via the paper feed clutch, and the paper feed roller rotates.
- ☐ At the same time, the push-down cam rotates, and it lifts the tray. Paper on the tray is carried into the printer by the paper feed roller.
- ☐ The actual paper length is detected by the ON period (passage time) of the paper feed sensor and the system speed. Then it is judged whether or not the detected length is equal to the paper length designated by the controller.

STACK FEED PREVENTION MECHANISM

Fixed separation pad method is used in order to separate each sheet of paper and prevent feeding the second sheet together.


Push-down Cam
Paper Feed Roller
Paper Feed Sensor (S1)
Paper Feed Solenoid (SL-1)
Tray
Push-down Cam
Tray

Waiting Mode

During Paper Feeding

Feed01.eps

Figure 2-21. Paper Feed Mechanism

MP TRAY EMPTY SENSOR

- The MP Tray Empty Sensor, mounted at the top of the MP Tray, detects paper in the MP Tray.
  (See "Figure 2-15")
- When there is paper, the actuator is lifted so that the light to the sensor is intercepted.
- When the paper has been used up, the actuator falls into the hole in the tray so that the light to the sensor is transmitted.

PAPER FEEDING RETRY FUNCTION

- When the Paper Feed Sensor does not turn on and off within the predetermined time, paper feed motion is performed again to reduce the possibility of a paper jam caused by a paper feeding error.
- This function works for paper feeding from any of the paper trays.

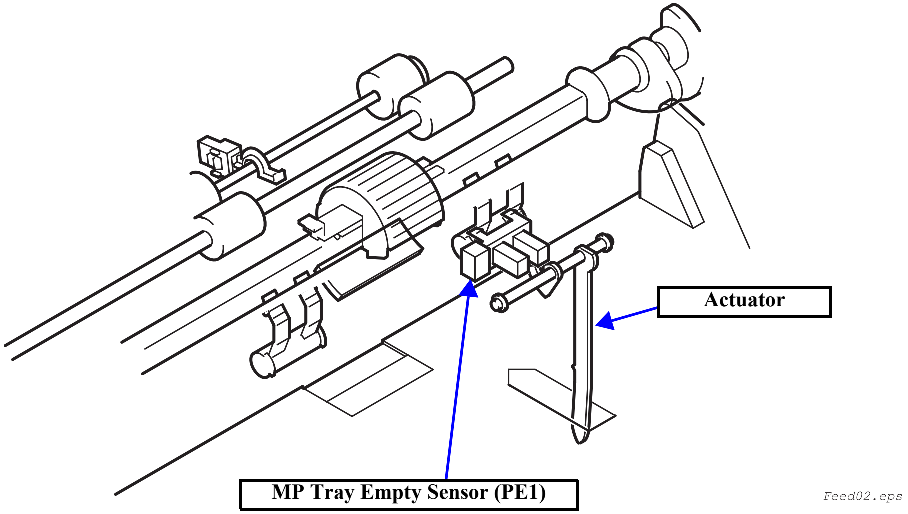


Figure 2-22. MP Tray Empty Sensor

2.2.6.2 Manual Paper Feeding (EPL-6200)

- Manual paper feeding can be performed through the paper feed slot above the MP Tray. *(See "Figure 2-23")*
- Compared with the paper feed mechanism of the MP Tray, the manual paper feed mechanism is different only in the paper setting location. The Paper Feed Roller and Paper Tray Empty detection system are common to both paper feed mechanisms.

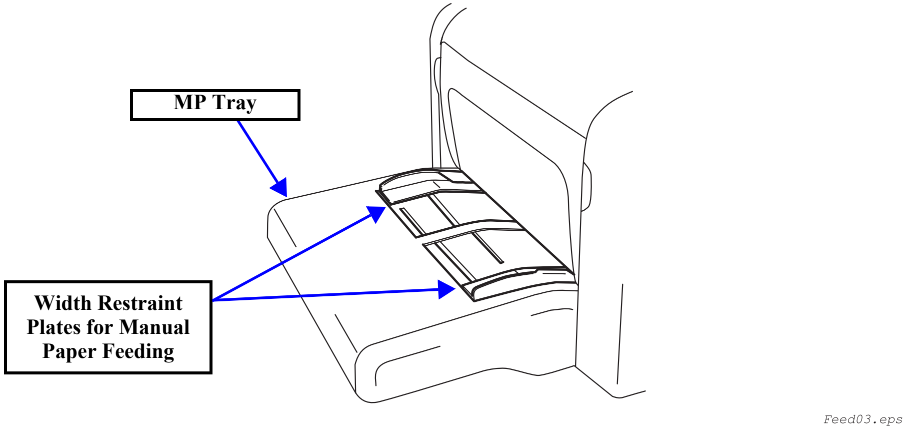


Figure 2-23. Manual Paper Feeding

2.2.7 Lower Cassette (Option for EPL-6200)

This section describes the mechanism of the optional lower cassette unit for EPL-6200.

2.2.7.1 Locations of Electrical Parts

See Figure 2-24 at right and Table 2-7 below for locations of electrical parts.

Table 2-7. Electrical Parts

Symbol	Names of Parts
SW1	Cassette Type Sensor Switch
PWB-A CAS	2nd Tray Control Board
SL-2	2nd Tray Paper Feed Solenoid

2.2.7.2 Paper Feed Mechanism

☐ Since the Lower Cassette Unit does not have drive motor, driving power in the Lower Cassette Unit for feeding and carrying paper is transmitted from the printer (from M1) via the connecting gear.
(See "Figure 2-25")

☐ Paper feed method is the same as with the MP Tray. However, paper separation method is different; the separation pad method is used for the MP Tray, while the separator claw is used for the Lower Cassette Unit.

☐ The separator claw method uses the paper separator claw installed at the paper cassette and the elasticity of paper. Only one sheet of paper is fed by one paper feed operation.

☐ The paper feed solenoid is controlled from the printer side via the control board in the Lower Cassette.

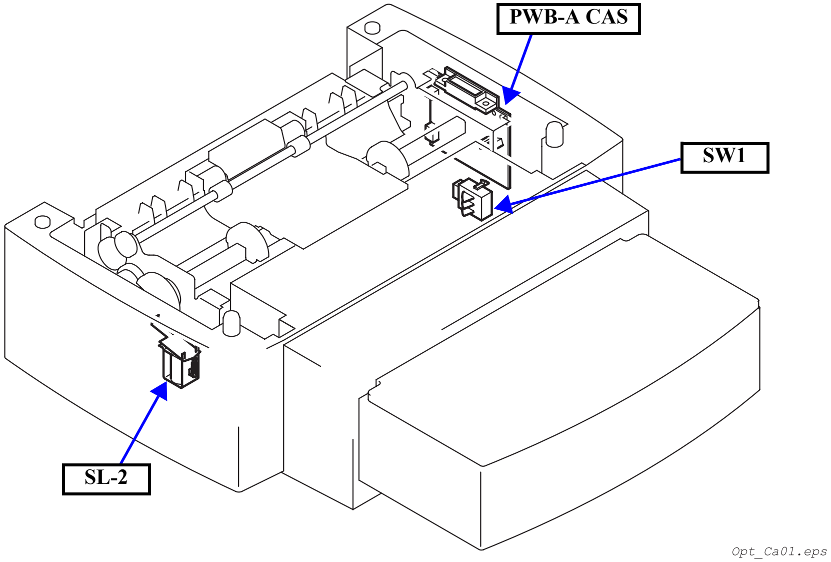

PWB-A CAS
SW1
SL-2
Opt_Ca01.eps

Figure 2-24. Locations of Electrical Parts

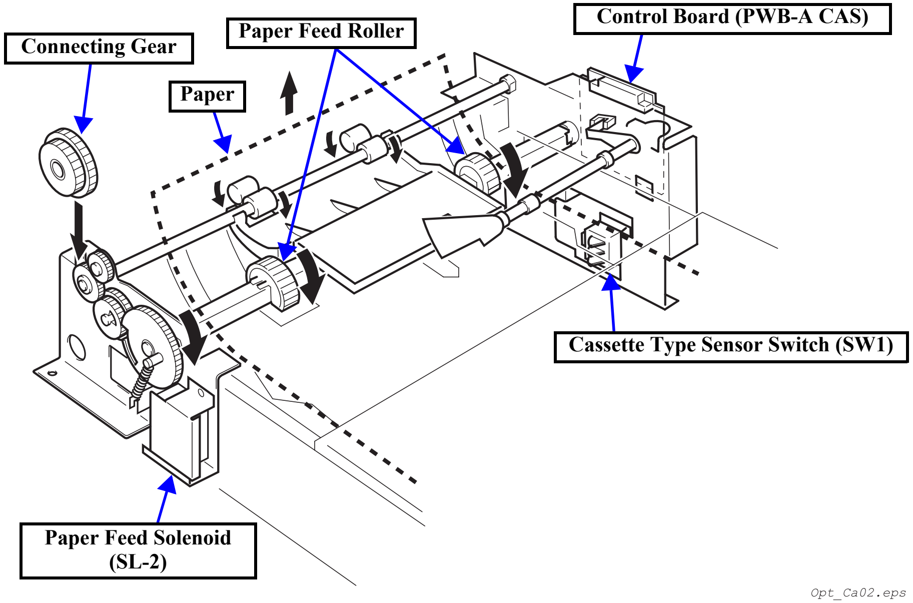

Connecting Gear
Paper Feed Roller
Control Board (PWB-A CAS)
Paper
Cassette Type Sensor Switch (SW1)
Paper Feed Solenoid (SL-2)
Opt_Ca02.eps

Figure 2-25. Paper Feed Mechanism

2.2.7.3 Paper Cassette Empty Sensor

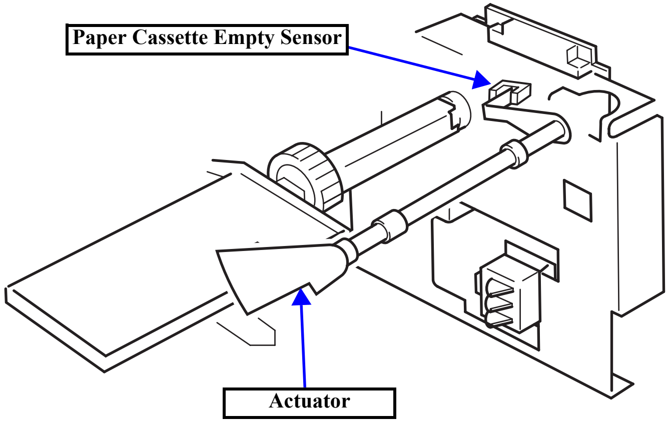
- The Paper Cassette Empty sensor is mounted on the control board in the Lower Cassette and it detects “paper cassette empty”.
  (See “Figure 2-26”)
- When there is paper, the actuator is lifted so that the light to the sensor is intercepted.
- When the cassette is empty of paper, the actuator falls into the hole in the paper lifting plate so that the light to the sensor is transmitted.

2.2.7.4 Cassette Type Sensor

- The Lower Cassette is equipped with the cassette type sensor switch having a lever.
  (See “Figure 2-27”)
- When the cassette for a paper size is inserted, the switch presser on the right side of the cassette pushes the lever according to the paper size and it turns the cassette type sensor ON.
- These triple switches enable the printer to distinguish the cassette types (paper sizes) by ON/OFF combinations of the switches.
- Table 2-8 below indicates the status of the Cassette Type Sensor Switch for each cassette type:

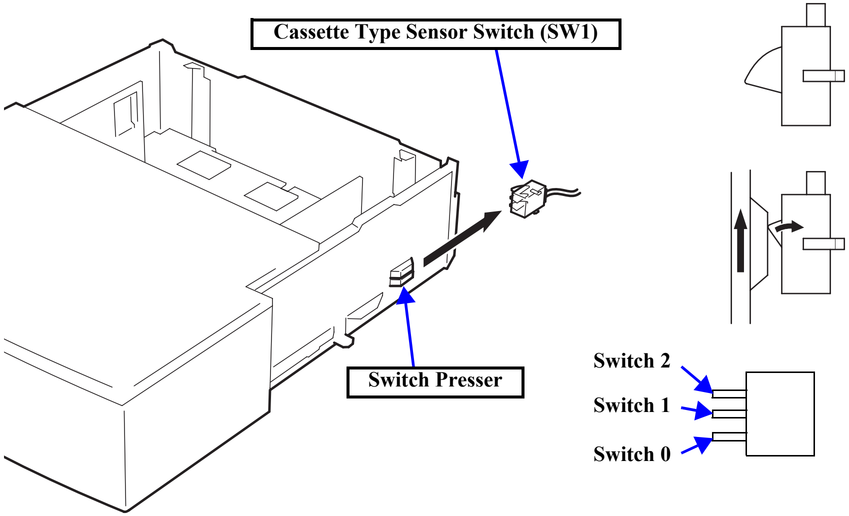
Table 2-8. Cassette Type Sensor Switches

Cassette Type	Switch 0	Switch 1	Switch 2
A4	OFF	OFF	ON
Letter	OFF	ON	OFF
No cassette	OFF	OFF	OFF



Opt_Ca03.eps

Figure 2-26. Paper Cassette Empty Sensor (Lower Cassette)



Opt_Ca04.eps

Figure 2-27. Cassette Type Sensor (Lower Cassette)

2.2.8 Paper Eject Process

2.2.8.1 Paper Eject Mechanism

Transports paper from the fuser area to the Paper Eject Roller.

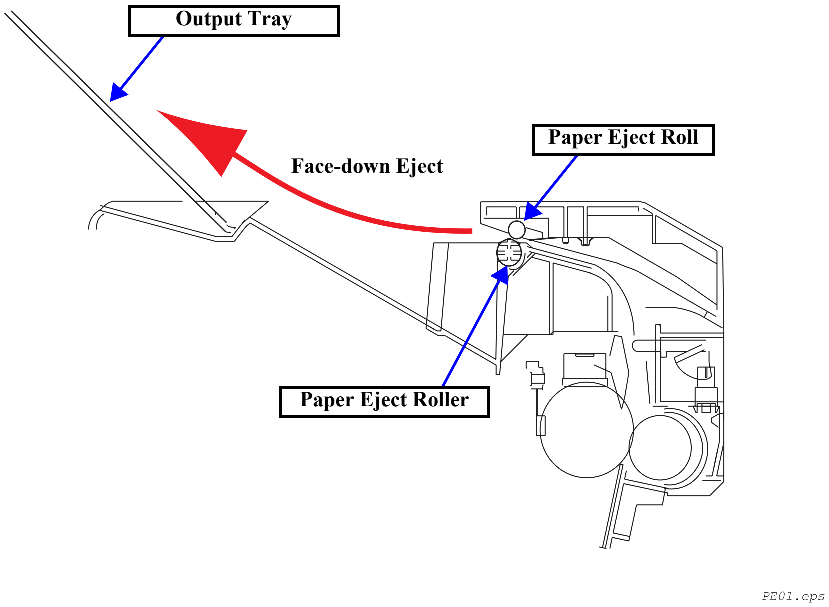

Output Tray
Paper Eject Roll
Face-down Eject
Paper Eject Roller
PE01.eps

Figure 2-28. Paper Eject Mechanism

2.2.9 Duplex Unit (option)

2.2.9.1 Locations of Electrical Parts

Table 2-9. Electrical Parts

Symbol	Name
M4	Duplex Unit Transport Motor
M5	Duplex Unit Inversion Motor
SL-3	Skew Correction Solenoid
PWB-A DUP	Duplex Unit Control Board
PC2	Top Cover Opening/Closing Detection Sensor
PC3	Bottom Cover Opening/Closing Detection Sensor
PC4	Duplex Unit Upper Transport Sensor
PC5	Duplex Unit Lower Transport Sensor

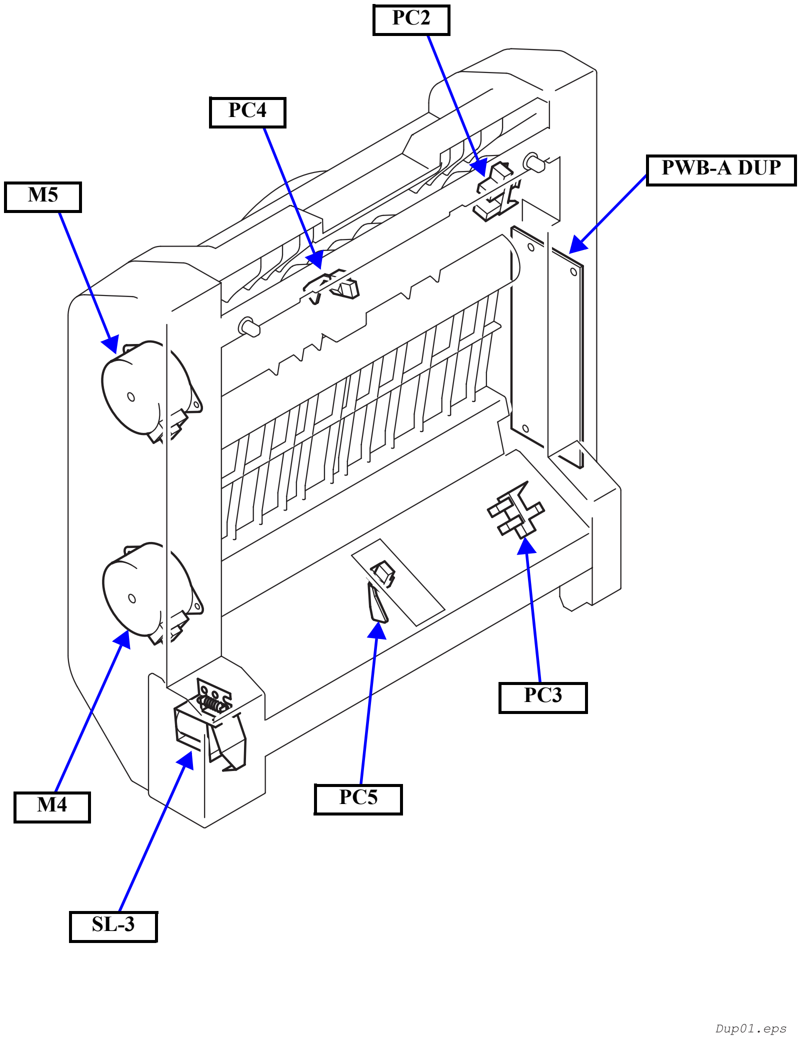


Figure 2-29. Locations of Electrical Parts

2.2.9.2 Driving of Duplex Unit

- ☐ The Duplex Unit is driven as follows: the paper after printing on one side is fed into the Output Tray once and when the tail end of the paper has left the guide behind the paper eject roller, the paper eject roller starts rotating to transport the paper into the Duplex Unit. *(See “Figure 2-30”)*
- ☐ The paper is transported into the printer body by the duplex unit transport motor.
- ☐ With the Duplex Unit installed, the paper eject roller is separated from the drive on the printer body and is driven by the inversion motor in the Duplex Unit. *(See “Figure 2-31”)*

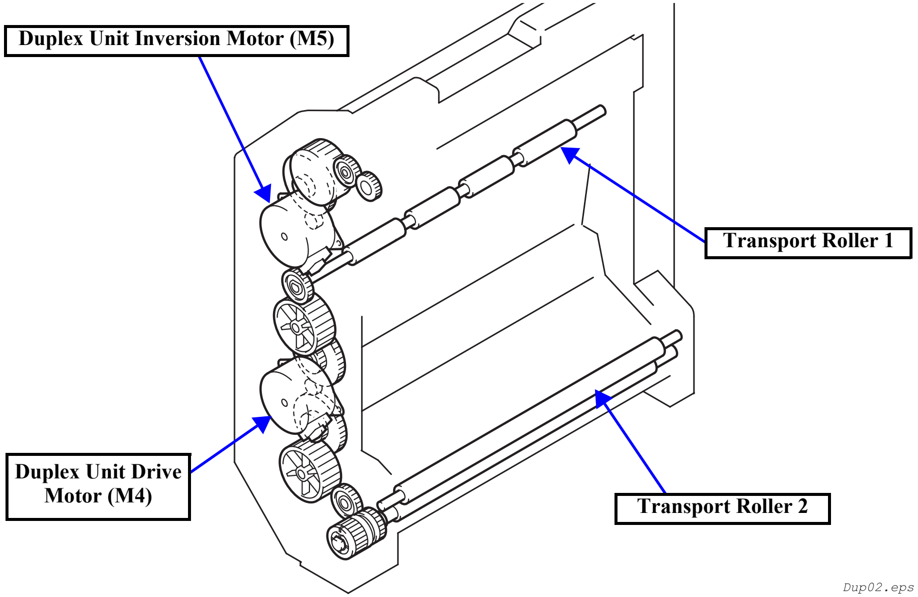

Duplex Unit Inversion Motor (M5)
Transport Roller 1
Duplex Unit Drive Motor (M4)
Transport Roller 2
Dup02.eps

Figure 2-30. Driving of Duplex Unit

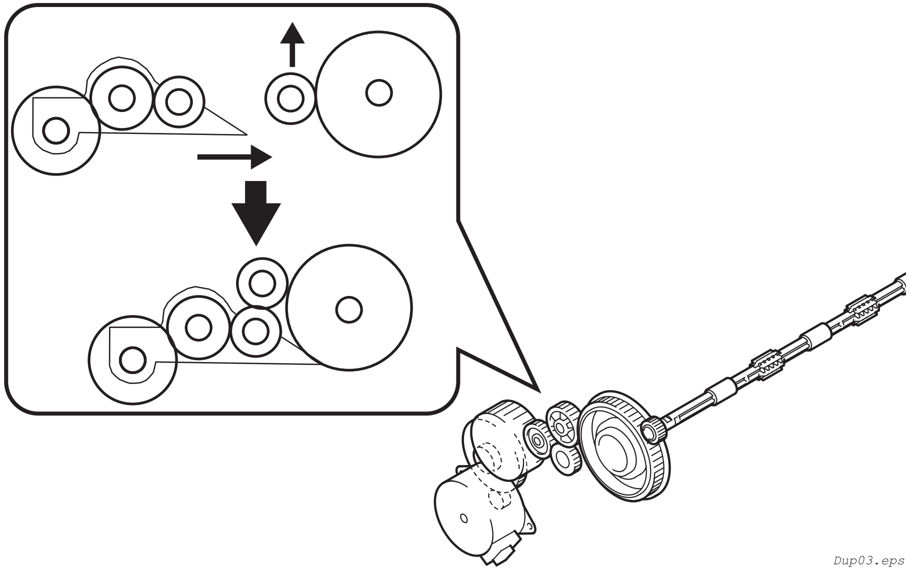


Figure 2-31. Driving of Inversion Motor

2.2.9.3 Paper Feeding System

1-SHEET CIRCULATION DUPLEX PRINTING

1. A sheet of paper is loaded and the image of the 2nd page is printed.
2. The sheet is sent to the paper eject area once, and then sent backward.
3. The sheet is transported into the Duplex Unit and fed into the printer body again without being stopped.
4. The image of the 1st page is printed on the sheet refed from the Duplex Unit.
5. The sheet of paper is ejected.
6. Steps 2 to 5 above are repeated for the subsequent sheets of paper.

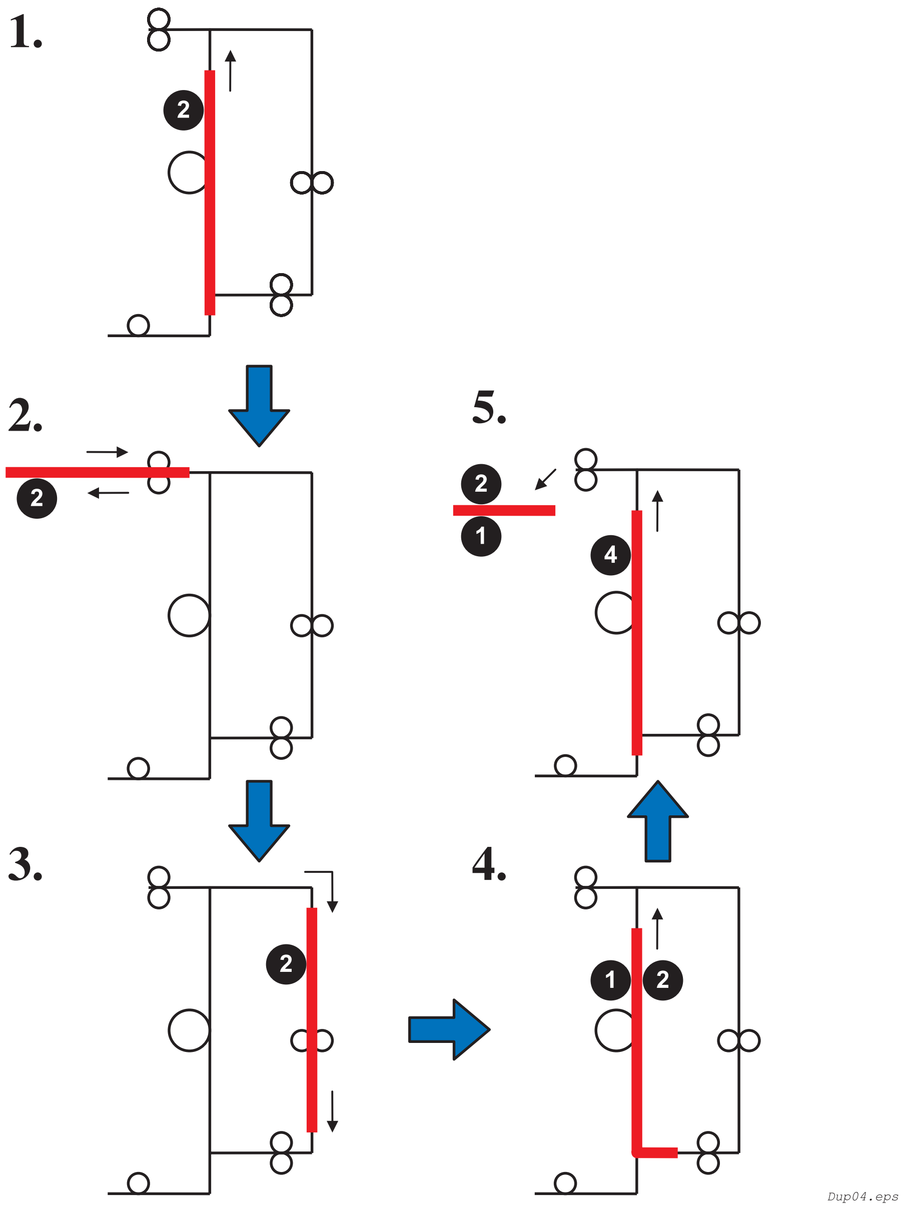


Figure 2-32. 1-sheet Circulation Duplex Printing

2-SHEET CIRCULATION DUPLEX PRINTING

1. The 1st sheet of paper is loaded and the image of the 2nd page is printed.
2. The sheet is sent to the paper eject area once, and then sent backward.
3. At the same time, the 2nd sheet of paper is loaded.
4. The image of the 4th page is printed on the 2nd sheet of paper.
5. The 1st sheet is transported into the Duplex Unit and fed into the printer body again without being stopped.
6. The image of the 1th page is printed on the 1st sheet that has been refed.
7. The 2nd sheet of paper is sent backward and transported into the Duplex Unit.
8. Simultaneously with ejection of the 1st sheet of paper, the image of the 3rd page is printed on the 2nd sheet.
9. The 2nd sheet of paper is ejected.
10. The 3rd sheet of paper is loaded and the image of the 6th page is printed.
11. Steps 2 to 10 above are repeated for the subsequent sheets of paper.

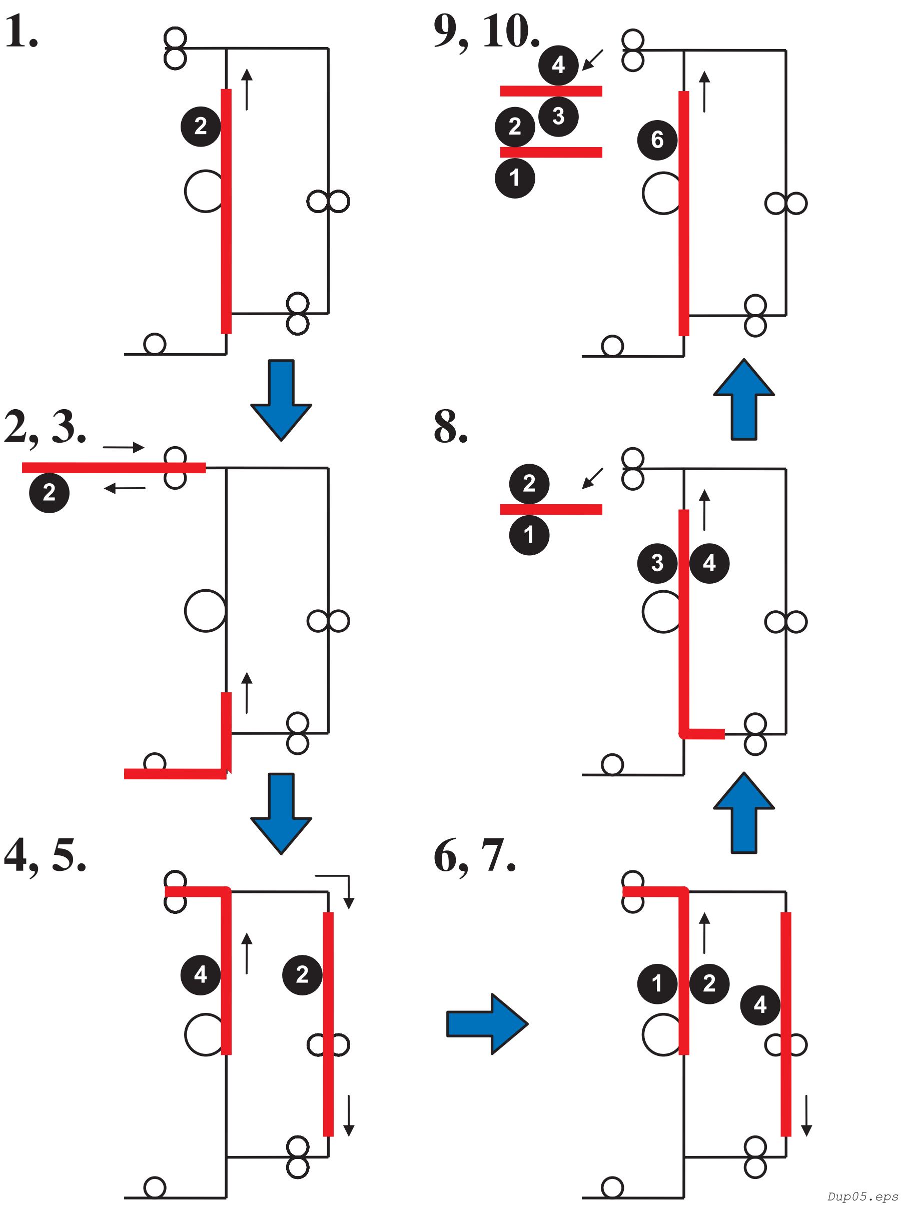


Figure 2-33. 2-sheet Circulation Duplex Printing

2.3 Operating Principles of Electric Circuitry

2.3.1 Operation Overview of the Main Control Circuit Board

The main controller of EPL-6200 is a full-set controller which controls various printer modes and all the necessary processing up to video data generation. The main controller of EPL-6200L (host-based printer), however, is a simplified controller which only transfers the video data generated on the printer driver side to the engine side.

2.3.1.1 Main Control Circuit Board (C533 MAIN) for EPL-6200

EPL-6200 succeeds to major features of EPL-6100, but its performance is improved in the following points:

- Printing speed improved to 20 ppm (EPL-6100: 16 ppm)

PRINCIPAL FEATURES

CPU:		Toshiba TMPR4955BFG-200
ASIC:		Memory Control + I/O control Integrated ASIC: DLC
Data bus clock:		66.7 MHz
Standard memory:		8 MB
Engine specifications::		A4, monochrome, 1200 dpi
Interface:	<Standard>	Parallel, USB
	<Optional>	Type B
Control panel:		No LCD
Network board:		Not mounted

CONSTITUTION OF MAIN CONTROL CIRCUIT BOARD

- ☐ Main Board Assy:
  C533 MAIN
- ☐ Memory Board Assy (IPL+ code + font):

Initial Products:	C533 PROG (16 MB Flash)
Stable Production:	C533 PROG-C (16 MB MASK)

COMPARISON OF EPL-6200 WITH EPL-6100

Table 2-10. Comparison of EPL-6200 with EPL-6100

Device		EPL-6100	EPL-6200
CPU		TMPR4955AF-200	TMPR4955BFG-200
ASIC		DLC: E05B96BA Memory, I/O integrated controller, USB	←
Memory	Onboard MASK ROM	None	←
	Standard ROM-DIMM	1 slot. +3.3V DIMM. IPL, Code, Font, SDRAM	1 slot. +3.3V DIMM. IPL, Code, Font, PS, SDRAM Address A23 expanded
	Standard ROM constitution at initial production	Code: Flash 8/16 Mbit (x16) 2 pieces Font: MASK 32 Mbit (x32) 1 piece	Code, Font, PS:1 6 MB Flash 64 Mbit (x16) 2 pieces
	Standard ROM constitution by steady production	Code, Font: 8 MB Mask 64 Mbit (x32) 1 piece	Code, Font, PS: 16 MB Mask128 Mbit (x32) 1 piece
	Font type	BitStream	AGFA
	Option ROM-DIMM	1 slot for local language and extension ROM, ConvROM (Board C) +3.3V DIMM	None
	Standard SDRAM	Mounted on the DIMM for code. 8 MB: 64 Mbit (x32) 1 piece	←
	SDRAM-DIMM	1slot. Newly employed 90-pin. 2 / 4 pieces 16, 32, 64, 128 MB	←
	EEPROM	128 Kbits, serial type, for storage of printer settings. M95128.	←
	CSIC	Not supported	Supported (Main firmware control)
Host I/F	Parallel interface	IEEE1284 compliance, B type connector. Separate IF board connected with FPC. Transceiver, Protection diode: None	← IF board connected with FPC. (Only parallel)
	USB	USB 1.1, B-type connector Separate IF board connected with FPC.	← Connected with harness to MAIN board.
	Serial interface	None UACLK: None	←
	Onboard Network	Not mounted. Mounted at soft development. DL10022.	←
Control Panel	Control Panel Unit	New-type controller panel. No LCD, 3 switches, 6 LEDs LED driver: 74LCX07. FPC connection.	← Harness connection.
Video I/F		MLT NC-L601H	←
Mechanical Controller		Integrated. (No Video I/F connector)	←

Table 2-10. Comparison of EPL-6200 with EPL-6100 (continued)

Device		EPL-6100	EPL-6200
Expandability	CPU	ES, initial MP: EPROM Steady MP: Mask	←
	ROM	Expansion by ROM-DIMM 90-pin. 1 slot	None
	SDRAM	Expansion by RAM-DIMM (Newly employed) 90-pin. 1 slot	←
	Type B	1ch: Normal orientation	1ch Reverse
IC socket		None	For Mechanical Controller CPU. Provided (WS), Not provided (ES, MP)
Clock	CPU (inside)	200MHz	←
	Bus	66.67MHz SSCG-L	←
	Video	38.9392MHz Crystal oscillator multiplied by 4 Dot: 19.4696 MHz (600 dpi) Dot: 38.9392 MHz (1200 dpi Half speed)	CRU:47.234MHz Crystal oscillator multiplied by 4 Dot: 23.617 MHz (600 dpi) Dot: 47.234 MHz (1200 dpi Half speed)
	USB	48.0000 MHz SSCG-L	←
	Mechanical Controller	12.0000 MHz DLC	←
	Network	None	←
DMA	I/O	DLC: Video, Parallel I/F, TypeB, USB	←
IDE (HDD)		None	←
Driver IC	RAM	None	←
	ROM	None	←
Reset		Reset by 5V power	←
Power Supply	To engine	5 V. 7-pin	5 V. 9-pin
	Regulator	5 V → 3.3 V (generated on board) 3.3 V → 1.5 V (generated on board)	←

MAJOR ELEMENTS

Table 2-11. Major Elements

Name		Location	Remarks
CPU/Clock		IC100	TMPR4955BFG-200 / 200MHz
ASIC	DLC: E05B96BA	IC101	Memory control and I/O control integrated ASIC
ROM DIMM	Standard ROM DIMM	CN300	IPL, code, font, PS, SDRAM
onboard SDRAM			Mounted on ROM DIMM. 8MB
SDRAM DIMM		CN200	For printer memory expansion (1 slot) 90-pin for exclusive use. 16, 32, 64, 128 MB
EEPROM		IC102	128 kbits, serial type, for storage of printer settings

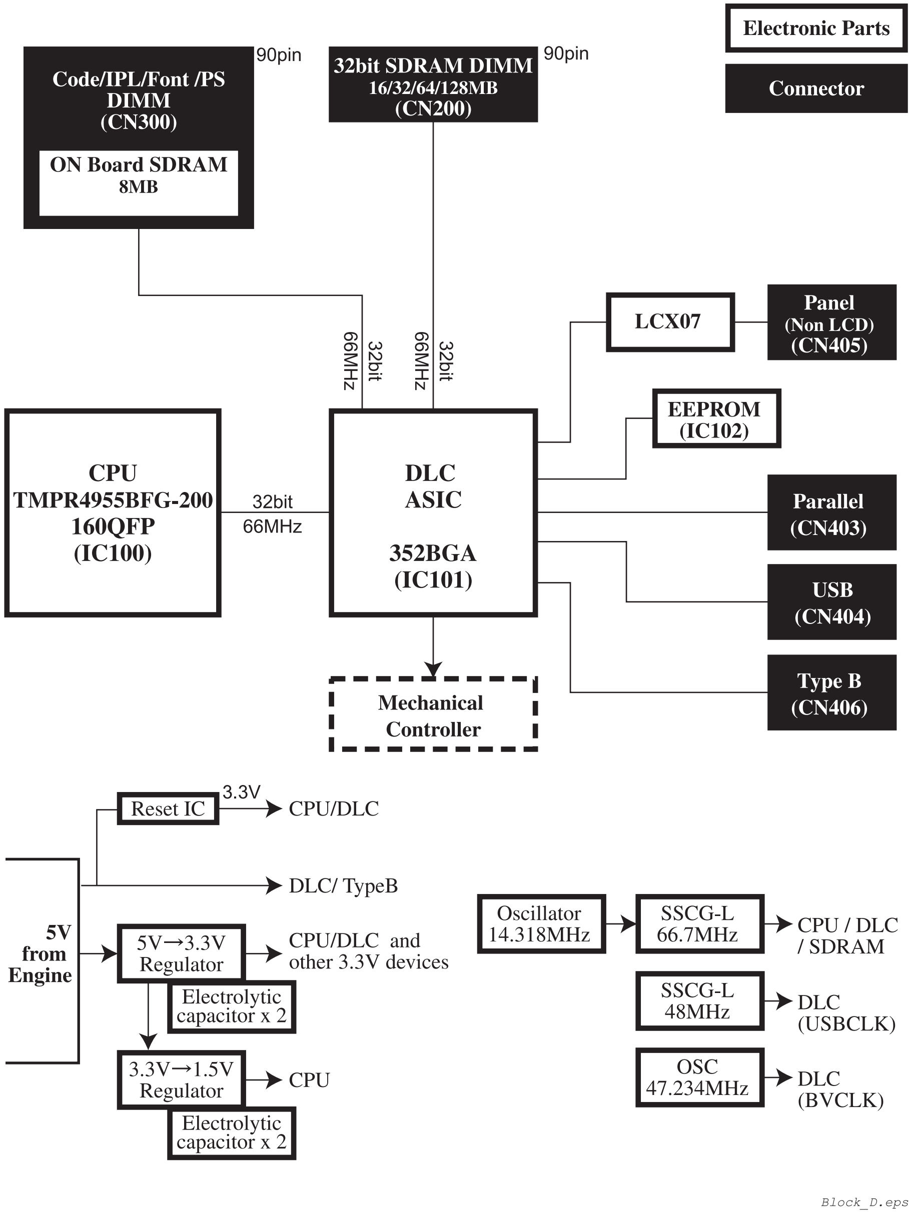

Electronic Parts
Connector
Code/IPL/Font /PS DIMM (CN300)
90pin
ON Board SDRAM 8MB
32bit SDRAM DIMM 16/32/64/128MB (CN200)
90pin
66MHz
32bit
66MHz
32bit
LCX07
Panel (Non LCD) (CN405)
EEPROM (IC102)
CPU TMPR4955BFG-200 160QFP (IC100)
32bit
66MHz
DLC ASIC 352BGA (IC101)
Parallel (CN403)
USB (CN404)
Type B (CN406)
Mechanical Controller
Reset IC
3.3V
CPU/DLC
DLC/ TypeB
5V from Engine
5V→3.3V Regulator
CPU/DLC and other 3.3V devices
Electrolytic capacitor x 2
3.3V→1.5V Regulator
CPU
Electrolytic capacitor x 2
Oscillator 14.318MHz
SSCG-L 66.7MHz
CPU / DLC / SDRAM
SSCG-L 48MHz
DLC (USBCLK)
OSC 47.234MHz
DLC (BVCLK)
Block_D.eps

Figure 2-34. C533 Controller Block Diagram

2.3.1.2 Main Control Circuit Board (C533Main) for EPL-6200L

EPL-6200L employs a newly developed controller for ESC/PageS Printing System.

PRINCIPAL FEATURES

- All the functions, including those of the CPU, are incorporated in one ASIC (called “SLC2”).
- As the CPU core, C33 core made by EPSON is employed.
- The algorithm of the extension circuit is BitRepeat3.
- This controller is a fruit of the full pursuit of cost reduction:
  2 MB of RAM (SDRAM is used), no optional RAM, no RITech and PGI (EnhancedMicroGray), and resolution fixed to 600 dpi
- Parallel interface (Nibble, ECP) and USB 1.1 interface

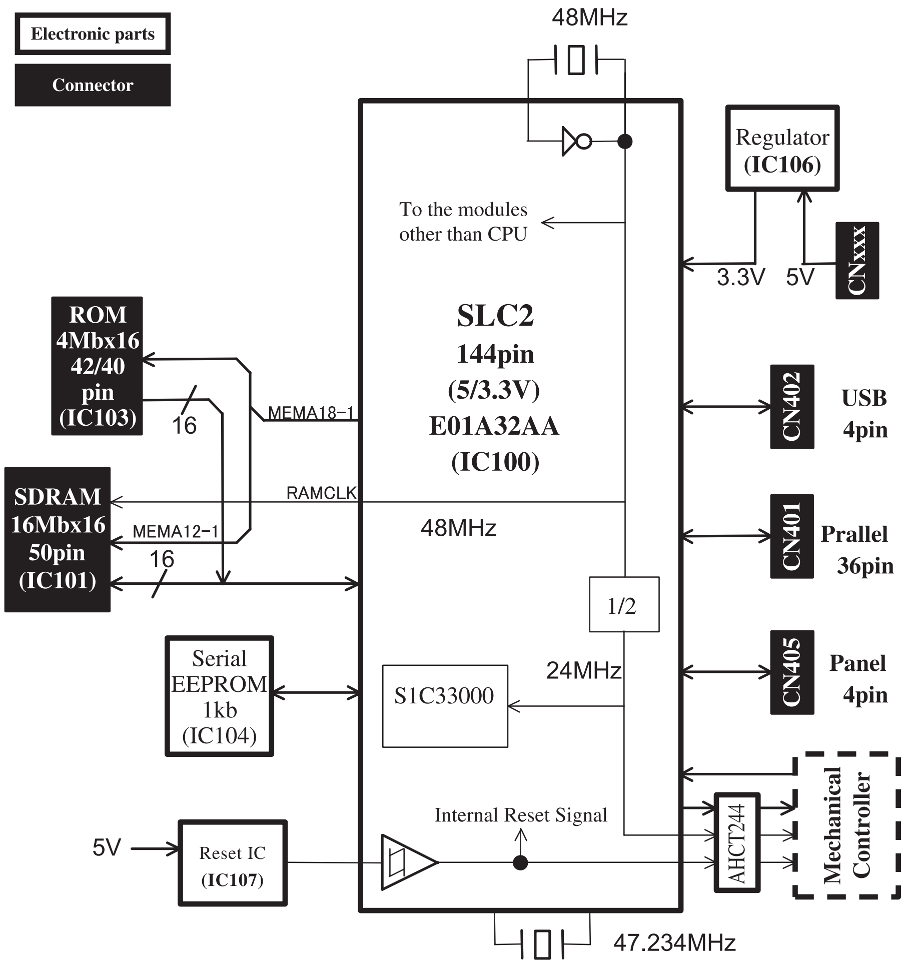
CONSTITUTION OF MAIN CONTROL CIRCUIT BOARD

☐ Main Board Assy:
C534 MAIN

MAJOR ELEMENTS

Table 2-12. Major Elements

Name	Location	Remarks
CPU/Clock	-	EPSON 32bit-RISC CPU S1C33000, 24MHz
ASIC SLC2	IC100	E01A32AA
TTL	IC105	SN74AHCT244PWR
ROM	IC103	
Reset IC:	IC107	M51953BFP-600C
Regulator	IC106	PQ033EZ01ZP
EEPROM	IC104	S93C46ADFJ
SDRAM	IC101	MSM56V16160F-10TS-K


Electronic parts
Connector
48MHz
To the modules other than CPU
Regulator (IC106)
3.3V
5V
CNxxx
SLC2
144pin
(5/3.3V)
E01A32AA
(IC100)
ROM 4Mbx16 42/40 pin (IC103)
16
MEMA18−1
CN402
USB 4pin
SDRAM 16Mbx16 50pin (IC101)
RAMCLK
MEMA12−1
16
48MHz
CN401
Prallel 36pin
1/2
Serial EEPROM 1kb (IC104)
S1C33000
24MHz
CN405
Panel 4pin
Internal Reset Signal
5V
Reset IC (IC107)
AHCT244
Mechanical Controller
47.234MHz

Block_A.eps

Figure 2-35. C534 Controller Block Diagram

CHAPTER

3

TROUBLESHOOTING

3.1 Overview

With this printer, almost all troubles can be coped with by using “EPSON Status Monitor 3” installed on the host personal computer.

Once an error occurs, the “EPSON Status Monitor 3” will appear as a pop-up window on the screen of the host PC. It will show details of how to cope with the trouble. In almost all cases, the user can recover the printer from the error, provided that the user follows the instructions indicated on the pop-up window.

In addition, the User's Manual describes detailed steps to be taken for recovery from typical errors.

3.1.1 Specified Tools

This printer does not require any specified tools for troubleshooting.

3.1.2 Procedure for Troubleshooting

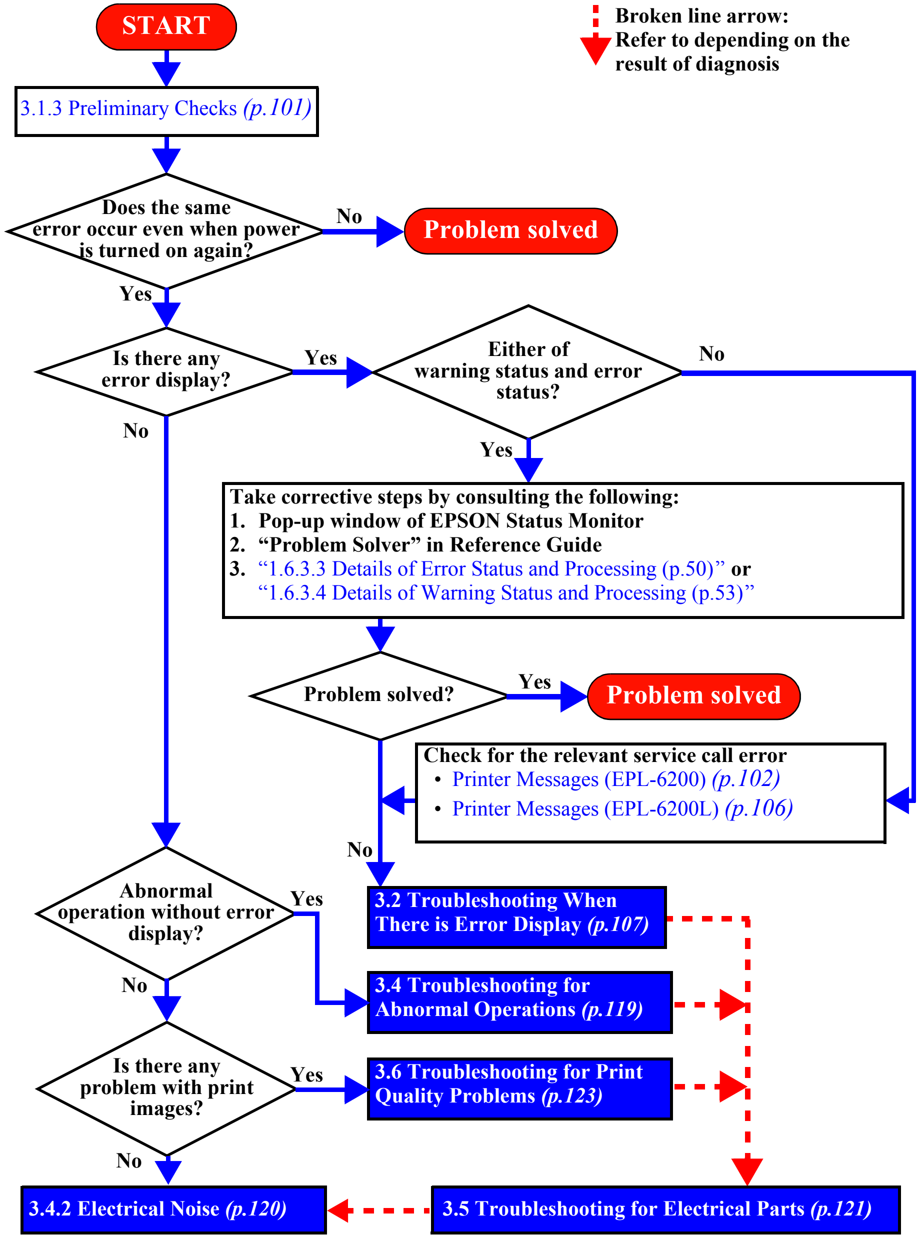
Perform troubleshooting work according to the flowchart shown at right.

CAUTION

Before starting disassembly and assembly work, read and understand thoroughly the contents of “Preliminary Checks” *(p.101)* **and “Notes on Troubleshooting”** *(p.101)*.

CHECK POINT

At the occurrence of a paper jam, see the following section: “3.3 Troubleshooting for Paper Jam” *(p.116)*


START
3.1.3 Preliminary Checks (p.101)
Does the same error occur even when power is turned on again?
No
Problem solved
Yes
Is there any error display?
Yes
Either of warning status and error status?
No
Yes
Take corrective steps by consulting the following:
1. Pop-up window of EPSON Status Monitor
2. “Problem Solver” in Reference Guide
3. “1.6.3.3 Details of Error Status and Processing (p.50)” or “1.6.3.4 Details of Warning Status and Processing (p.53)”
Problem solved?
Yes
Problem solved
Check for the relevant service call error
• Printer Messages (EPL-6200) (p.102)
• Printer Messages (EPL-6200L) (p.106)
No
No
Abnormal operation without error display?
Yes
3.2 Troubleshooting When There is Error Display (p.107)
3.4 Troubleshooting for Abnormal Operations (p.119)
No
Is there any problem with print images?
Yes
3.6 Troubleshooting for Print Quality Problems (p.123)
No
3.4.2 Electrical Noise (p.120)
3.5 Troubleshooting for Electrical Parts (p.121)
Broken line arrow: Refer to depending on the result of diagnosis

Flowchart 3-1. Procedure for Troubleshooting

3.1.3 Preliminary Checks

Before starting troubleshooting, be sure to verify that the following conditions are all met:

- ☐ The power supply voltage must be within the specification limits.
  (Measure the voltage at the wall socket.)
- ☐ The POWER CORD must be free from damage, short circuit or breakage, or miswiring in the POWER CORD.
- ☐ The printer must be grounded properly.
- ☐ The printer should not be located in a place where it can be exposed to too high or low temperature, too high or low humidity, or abrupt temperature change.
- ☐ The printer should not be located near waterworks, near humidifiers, near heaters or near flames, in a dusty atmosphere or in a place where the printer can be exposed to blast from an air conditioner.
- ☐ The printer should not be located in a place where volatile or inflammable gases are produced.
- ☐ The printer should not be located in a place where it can be exposed to direct rays of the sun.
- ☐ The printer must be located in a well-ventilated place.
- ☐ The printer must be placed on a strong and steady level table (without an inclination larger than 5 degrees).
- ☐ The paper used must conform to the specification.
  (The standard paper is recommended.)
- ☐ There is no error in handling of the printer.
- ☐ The Regular Replacement Parts must have been replaced every time their respective specified numbers of sheets had been printed.
- ☐ Check the inside of the printer, and remove foreign matters, if any, such as paper clips, staples, bits of paper, paper dust or toner.
- ☐ Clean the inside of the printer and the rubber rolls.

3.1.4 Notes on Troubleshooting

- ☐ The troubleshooting method described here assumes there is no malfunction in the printer controller (Main Board). If you can not fix a problem even by following the troubleshooting procedure, you are advised to replace the printer controller with a normal one and then follow the same procedure.
  If you can not recover the printer from the trouble even with the printer controller replaced, replace the “Parts that may be the source of this error” and related parts with new ones in order one by one and repeat operation checks.
- ☐ Some normal components may be required as troubleshooting tools to identify the cause of the trouble. You are advised to have a spare HVPS/MCU and EP Cartridge.
- ☐ Check not only the “Parts that may be the source of this error” but also their components and related parts.
- ☐ Be sure to unplug the POWER CORD before starting troubleshooting work except when turning power ON is needed. With the power cord connected, never touch any live parts unnecessarily.

3.1.5 Overall Control System

You are advised to understand the overall control system for easy troubleshooting at the occurrence of paper jams, troubles or image defects.

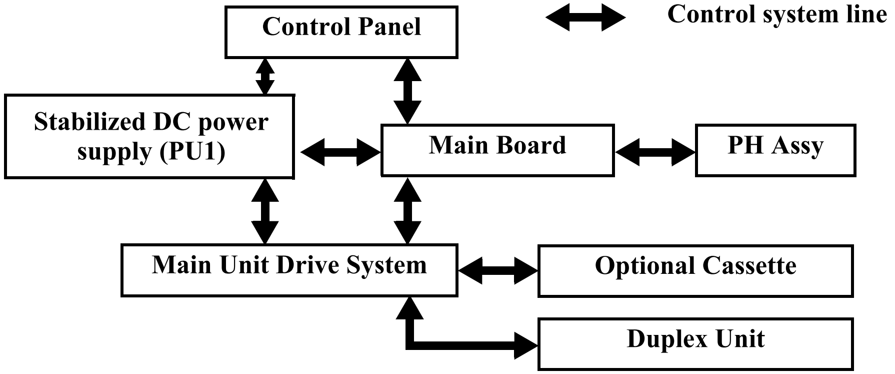


Figure 3-1. Overall Block Diagram

3.1.6 Printer Messages (EPL-6200)

The state of EPL-6200 is indicated in the following four types and all the indications are expressed by the LEDs on the control panel.

☐ Status:
Indicates an operation state of the printer.
Status messages are displayed only when no error is occurring or during initialization.

☐ Error:
Indicates that any error has occurred.

☐ Warning:
Indicates that warning is given.

☐ Service Call Error
Indicates that any error requiring service call has occurred.

3.1.6.1 Service Call Error

When there is any error display, such as a service call error, print an error sheet to identify the content of error first, and then recover or repair the printer.

NOTE 1: *For a list of printer messages, refer to "1.5.3 Printer Messages (p.44) ".*

2: *For special operations on the control panel, refer to "1.5.4 Special Operation (EPL-6200) (p.46) ".*

☐ How to print an error sheet
Press the Information switch at the occurrence of a service call error. An error sheet will be printed after warm boot.

CHECK POINT

The special operation function is a hidden function, which must not be opened to users.

☐ Engine Errors

Table 3-1 below shows the engine-related service call errors in EPL-6200

Table 3-1. Service Call Error (Engine-Related)

Error Code Eggg	Explanation	Paper LED	Toner LED	Memory LED	Ready LED	Data LED	Error LED	Refer to
001	Fuser warming up problem	●					●	*p. 107*
003	Fan problem	●	●				●	*p. 108*
004	Polygon Motor Error			●			●	*p. 108*
005	Laser problem	●		●			●	*p. 109*
006	High voltage circuit problem		●	●			●	*p. 109*
007	Fuser low temperature problem	●	●	●			●	*p. 111*
008	Fuser high temperature problem				●		●	*p. 110*
014	Engine Communication Error		●	●	●		●	*p. 113*

●: Lighting up

☐ Controller Errors

Table 3-2 below shows a list of controller-related service call errors in EPL-6200.

Table 3-2. Service Call Error (Controller-Related)

Error Code C ffff	Explanation	Paper LED	Toner LED	Memory LED	Ready LED	Data LED	Error LED	Refer to
0017	CPU Error (Undefined interruption occurred)				●		●	p.110
0081	CPU Error (TLB revision exception)	●			●		●	
0082	CPU Error (TLB mistake exception [Load/Fetch])	●			●		●	
0083	CPU Error (TLB mistake exception [Store])	●			●		●	
0084	CPU Error (Address error exception [Load/Fetch])		●		●		●	
0085	CPU Error (Address error exception [Store])		●		●		●	
0086	CPU Error (Bus error exception [Fetch])	●	●		●		●	
0087	CPU Error (Bus error exception [Load/Store])	●	●		●		●	
0088	CPU Error (SYSCALL exception)			●	●		●	
0089	CPU Error (Break exception)			●	●		●	
0090	CPU Error (Reservation command exception)			●	●		●	
0091	CPU Error (Coprocessor unused exception)	●		●	●		●	
0092	CPU Error (FPU exception)	●		●	●		●	
0093	CPU Error (TLB exception)	●			●		●	
0094	CPU Error (XTLB exception)	●			●		●	
0095	CPU Error (Cash exception)			●	●		●	
0096	CPU Error (Trap exception)			●	●		●	
0097	CPU Error (FPU error exception)	●		●	●		●	
0098	CPU Error (Watch exception)		●	●	●		●	
0128~0254	CPU Error (Undefined trap)			●	●		●	
0255	CPU Error (NMI exception)	●	●	●	●		●	
0256	CPU Error (Division by 0)					●	●	
0257	CPU Error (Arithmetic Overflow)					●	●	
0258	CPU Error (Break generated)					●	●	
0800	IPL Error (Controller defective)	●				●	●	
0998	Engine Communication Error (only occurs at power on)		●			●	●	p.110
0999	No Program Data in Flash ROM	●	●			●	●	p.113

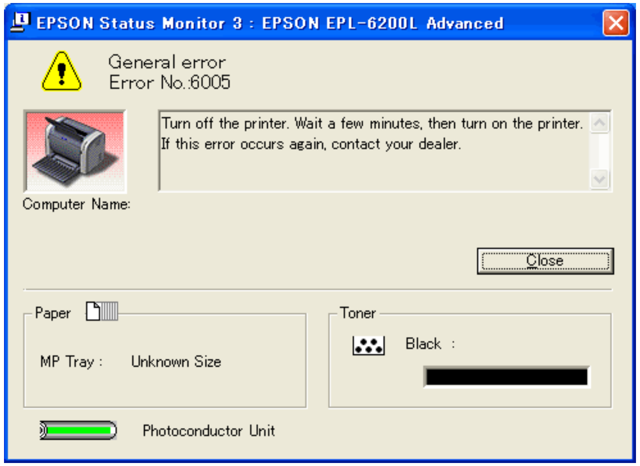
Table 3-2. Service Call Error (Controller-Related) (continued)

Error Code C ffff	Explanation	Paper LED	Toner LED	Memory LED	Ready LED	Data LED	Error LED	Refer to
1000	Standard RAM Error (No RAM at all, etc.)			●		●	●	*p.112*
1001	Standard RAM Error (Not enough for minimum stack, etc.)	●		●		●	●	
1002	Standard RAM Error (Not enough for standard size, etc.)		●	●		●	●	
1020	RAM Error (slot 0)	●	●	●		●	●	*p.112*
1100	ROM Checksum Error (bit 0-15) (font)	●	●		●			*p.113*
1101	ROM Checksum Error (bit 16-31) (font)	●	●		●			
1120	ROM Checksum Error (bit 0-7) (program)	●	●		●			*p.113*
1121	ROM Checksum Error (bit 8-15) (program)	●	●		●			
1122	ROM Checksum Error (bit 16-23) (program)	●	●		●			
1123	ROM Checksum Error (bit 24-31) (program)	●	●		●			
1151	Main Unit ROM Checksum Error			●	●	●		*p.113*
1152	FONT-ROM Checksum Error		●		●	●		
1153	PS Module Checksum Error		●	●	●	●		
1180	Optional ROM module A checksum error			●	●			*p.114*
1185	Unsupported ROM module			●	●			
1200	EEPROM writing error	●		●	●			*p.114*
1210	EEPROM writing limit		●	●	●			
1400	Engine initialization error	●	●	●	●			*p.115*
1700	Built-in network hardware error					●		–
1999	Other hardware error	●				●		*p.115*
2000	Software error		●			●		*p.115*

●: Lighting up

3.1.7 Printer Messages (EPL-6200L)

EPL-6200L is not equipped with an LCD. Once an error occurs, the “EPSON Status Monitor 3” will appear as a pop-up window on the screen of the host PC, showing the trouble.



EPSON Status Monitor 3 : EPSON EPL-6200L Advanced

General error
Error No.:6005

Turn off the printer. Wait a few minutes, then turn on the printer.
If this error occurs again, contact your dealer.

Computer Name:

MP Tray : Unknown Size

Figure 3-2. EPSON Status Monitor !3 (At occurrence of service call error)

☐ Engine Errors

Table 3-3. Engine Errors

Explanation	Status code	Refer to
Fuser warming up problem	6001	*p. 107*
Fan problem	6003	*p. 108*
Polygon Motor Error	6004	*p. 108*
Laser problem	6005	*p. 109*
High voltage circuit problem	6006	*p. 109*
Fuser low temperature problem	6007	*p. 111*
Fuser high temperature problem	6008	*p. 110*
Engine Communication Error	6014	*p. 110*

3.2 Troubleshooting When There is Error Display

This section describes troubleshooting for errors indicated by error display. After identifying the error item, refer to the appropriate page for troubleshooting.
This section also describes troubleshooting for faulty operation of the printer.

CHECK POINT

> **Refer to "Flowchart 3-1. Procedure for Troubleshooting *(p.100)*" first and then follow the troubleshooting procedures described in Table 3-4 to Table 3-18.**
> **Troubleshooting here should be used only for errors that can not be cleared even by following the instructions in EPSON Status Monitor 3.**

3.2.1 Fuser warming up problem

☐ Any of the following conditions is handled as a fuser warming up problem:

  - At start of warming up, the voltage of the thermistor is kept low over the predetermined period of time.
  - The temperature detected by the thermistor within a period from 5 seconds after to 9 seconds after start of warming-up was found below the standard value over the predetermined period of time. (However, only when the temperature detected by the thermistor is below 80°C.)
  - No temperature rise was detected by the thermistor for more than 3 seconds within a period from the predetermined period of time after turning on of the heater lamp to the turning off of the heater lamp.
  - The heater lamp was kept on for more than 30 seconds. (However, except while the Main Motor is ON)

Table 3-4. Troubleshooting for "Fuser warming up problem"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Thermistor (TH1) *(p.153)* • Heater lamp (H1) *(p.153)* • Thermostat (TS1) *(p.153)* • Fuser Unit *(p.152)* • Main Board Assy (C533/C534 Main) *(p.146)* • Power Supply Unit (PU1) *(p.151)*		
1	**Fuser unit** Replace the fuser unit. ♦Has the error been cleared?	Go to Step 2	Go to Step 5
2	**Thermistor (TH1)** Replace the thermistor. ♦Has the error been cleared?	Replace the thermistor.	Go to Step 3
3	**Heater lamp (H1)** Replace the heater lamp. ♦Has the error been cleared?	Replace the heater lamp.	Go to Step 4
4	**Thermostat (TS1)** Replace the thermostat. ♦Has the error been cleared?	Replace the thermostat.	Replace the fuser unit.
5	**Main Board Assy.** Replace the Main Board Assy. ♦Has the error been cleared?	Replace the Main Board Assy.	Go to Step 6
6	**Power supply unit** Replace the power supply unit. ♦Has the error been cleared?	Replace the power supply unit.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.2 Fan problem

☐ The following condition is handled as a fan problem:

- During operation of the Cooling Fan Motor, the lock signal (H or L) has been maintained for more than the predetermined period of time.

Table 3-5. Troubleshooting for "Fan problem"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Cooling Fan Motor *(p.155)* • Main Board Assy (C533/C534 Main) *(p.146)* • Power Supply Unit (PU1) *(p.151)*		
1	**Cooling Fan Motor 1** Check the connection of the motor connector, and correct it if any problem is found. ♦Has the error been cleared?	Problem solved	Go to Step 2
2	**Cooling Fan Motor 2** Check the loading on the fan mechanism, and correct it if any problem is found. ♦Has the error been cleared?	Problem solved	Go to Step 3
3	**Cooling Fan Motor 3** Replace the cooling fan. ♦Has the error been cleared?	Replace the cooling fan.	Go to Step 4
4	**Main Board Assy.** Replace the Main Board Assy. ♦Has the error been cleared?	Replace the Main Board Assy.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.3 Polygon Motor Error

☐ Any of the following conditions is handled as an polygon motor error:

- The lock signal was not detected within the predetermined period of time counted from one second after start of the polygon motor.
- The lock signal was not detected during the period of 1 second counted from 1.5 seconds after emission of the first lock signal.
- No lock signal was detected for 0.5 second continuously under the conditions where the polygon motor was in a steady running state.
- The lock signal was kept ON for more than 5 seconds even with the polygon motor turned OFF.

Table 3-6. Troubleshooting forTroubleshooting for "Polygon Motor Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • PH Unit *(p.154)* • FFC • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Connection with connectors** Check the connection of the cable, and correct it if any problem is found. ♦Has the error been cleared?	Problem solved	Go to Step 2
2	**PH unit** Replace the PH unit. ♦Has the error been cleared?	Replace the PH unit.	Go to Step 3
3	**Main Board Assy.** Replace the Main Board Assy. ♦Has the error been cleared?	Replace the Main Board Assy.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.4 Laser problem

☐ Any of the following conditions is handled as a laser problem:

- When the laser output exceeded the upper limit.
- The laser output dropped below the lower limit.

Table 3-7. Troubleshooting for "Laser problem"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • PH Unit *(p.154)* • FFC • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Connection with connectors** Check the connection of the cable, and correct it if any problem is found. ♦Has the error been cleared?	Problem solved	Go to Step 2
2	**PH unit** Replace the PH unit. ♦Has the error been cleared?	Replace the PH unit.	Go to Step 3
3	**Main Board Assy.** Replace the Main Board Assy. ♦Has the error been cleared?	Replace the Main Board Assy.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.5 High voltage circuit problem

☐ Any of the following conditions is handled as a high voltage circuit problem:

- The charging monitor voltage (HVC_MON) signal was detected to be out of the predetermined limits after passage of the predetermined period of time from power on.
- The transfer voltage monitor signal (T_MON_V) or the transfer current monitor signal (T_MON_I) was detected to be out of the predetermined limits.

Table 3-8. Troubleshooting for "High voltage circuit problem"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Fuser Unit *(p.152)* • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Fuser unit** Replace the fuser unit. ♦Has the error been cleared?	Replace the fuser unit.	Go to Step 2
2	**Main Board Assy.** Replace the Main Board Assy. ♦Has the error been cleared?	Replace the Main Board Assy.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.6 Fuser high temperature problem

- ☐ The following condition is handled as a fuser high temperature problem:
  - ■ During temperature control, the thermistor detected temperature was kept above 235°C over the predetermined period of time.

Table 3-9. Troubleshooting for "Fuser high temperature problem"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Thermistor (TH1) *(p.153)* • Heater lamp (H1) *(p.153)* • Thermostat (TS1) *(p.153)* • Fuser Unit *(p.152)* • Main Board Assy (C533/C534 Main) *(p.146)* • Power Supply Unit (PU1) *(p.151)*		
1	**Fuser unit** Replace the fuser unit. ♦Has the error been cleared?	Go to Step 2	Go to Step 5
2	**Thermistor (TH1)** Replace the thermistor. ♦Has the error been cleared?	Replace the thermistor.	Go to Step 3
3	**Heater lamp (H1)** Replace the heater lamp. ♦Has the error been cleared?	Replace the heater lamp.	Go to Step 4
4	**Thermostat (TS1)** Replace the thermostat. ♦Has the error been cleared?	Replace the thermostat.	Replace the fuser unit.
5	**Main Board Assy.** Replace the Main Board Assy. ♦Has the error been cleared?	Replace the Main Board Assy.	Go to Step 6
6	**Power supply unit** Replace the power supply unit. ♦Has the error been cleared?	Replace the power supply unit.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.7 CPU Error

Table 3-10. Troubleshooting for "CPU Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

CHECK POINT

A CPU error can occur depending on the printing data structure sent from the host/application to the printer. Therefore, perform operation checks in different operation environments and with different printing data.

3.2.8 Engine Communication Error

This error is in communication between the main control circuit and the engine control circuit.

Table 3-11. Troubleshooting for "Engine Communication Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

3.2.9 Fuser low temperature problem

☐ The following condition is handled as a fuser low temperature problem:

- During temperature control, the thermistor detected temperature was kept below the preset temperature over the predetermined period of time continuously.
  The preset temperature is as follows:
  In 600 dpi printing mode: 140°C
  In 1200 dpi printing mode: 110°C
  In standby mode: 70°C

Table 3-12. Troubleshooting for "Fuser low temperature problem"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Thermistor (TH1) *(p.153)* • Heater lamp (H1) *(p.153)* • Thermostat (TS1) *(p.153)* • Fuser Unit *(p.152)* • Main Board Assy (C533/C534 Main) *(p.146)* • Power Supply Unit (PU1) *(p.151)*		
1	**Fuser unit** Replace the fuser unit. ♦ Has the error been cleared?	Go to Step 2	Go to Step 5
2	**Thermistor (TH1)** Replace the thermistor. ♦ Has the error been cleared?	Replace the thermistor.	Go to Step 3
3	**Heater lamp (H1)** Replace the heater lamp. ♦ Has the error been cleared?	Replace the heater lamp.	Go to Step 4
4	**Thermostat (TS1)** Replace the thermostat. ♦ Has the error been cleared?	Replace the thermostat.	Replace the fuser unit.
5	**Main Board Assy.** Replace the Main Board Assy. ♦ Has the error been cleared?	Replace the Main Board Assy.	Go to Step 6
6	**Power supply unit** Replace the power supply unit. ♦ Has the error been cleared?	Replace the power supply unit.	Go to "3.4.2 Electrical Noise" *(p.120)*

3.2.10 Standard RAM Error

This error relates to the standard RAM memory mounted on the board assy.

Table 3-13. Troubleshooting for "Standard RAM Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Main Board Assy (C533/C534 Main) *(p.146)* • Standard ROM-DIMM (EPL-6200 only)		
1	**Checking the Standard ROM-DIMM (EPL-6200 only)** Check to see if the mounted ROM-DIMM is exactly as specified and connected properly. (Remove once and then install again) ♦Does the error still occur?	Go to Step 2	Problem solved
2	**Replacing the Standard ROM-DIMM (EPL-6200 only)** Replace the Standard ROM-DIMM. ♦Does the error still occur?	Go to Step 3	Replace the faulty ROMDIMM
3	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

Note : The Main Board Assy and Memory Board Assy used with EPL-6200 and EPL-6200L are as listed below.
The standard RAM is mounted on the Memory Board Assy (EPL-6200) or on the Main Board Assy (EPL-6200L).
For details, refer to "2.3.1 Operation Overview of the Main Control Circuit Board" *(p.94)*.

Parts Name	EPL-6200	EPL-6200L
Main Board Assy	*C533MAIN*	**C534MAIN**
Memory Board Assy (Steady production)	**C533PROG** **(C533PROG-C)**	

3.2.11 RAM Error (Slot 0)

This error relates to expanded RAM. (EPL-6200 only)

Table 3-14. Troubleshooting for "RAM Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Main Board Assy (C533/C534 Main) *(p.146)* • Expanded RAM DIMM (EPL-6200 only)		
1	**Expanded RAM-DIMM** Remove the expanded RAM DIMM and check the operation. ♦Does the error still occur?	Go to Step 2	Problem solved (Advise the user to use the recommended RAM)
2	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

CHECK POINT

- **Since the expanded RAM is mounted at the user level, make certain before troubleshooting that it has been mounted securely.**
- **The expanded RAM must be EPSON's original SDRAMDIMM.**

3.2.12 ROM Checksum Error (Font)

This error is a standard font ROM fault.

Table 3-15. Troubleshooting for "ROM Checksum Error (Font)"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Main Board Assy (C533/C534 Main) *(p.146)* • Standard ROM-DIMM		
1	**Checking the Standard ROM-DIMM (EPL-6200 only)** Check to see if the mounted ROM-DIMM is exactly as specified and connected properly. (Remove once and then install again) ♦ Does the error still occur?	Go to Step 2	Problem solved
2	**Replacing the Standard ROM-DIMM (EPL-6200 only)** Replace the Standard ROM-DIMM. ♦ Does the error still occur?	Go to Step 3	Replace the faulty ROMDIMM
3	**Main Board Assy.** 1. Replace the Main Board Assy. ♦ Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

Note : The Main Board Assy and Memory Board Assy used with EPL-6200 and EPL-6200L are as listed below.
The font ROM is mounted on the Memory Board Assy (EPL-6200). For details, refer to "2.3.1 Operation Overview of the Main Control Circuit Board" *(p.94)*.

3.2.13 ROM Checksum Error (Program)

This error is a built-in program ROM fault.

Table 3-16. Troubleshooting for "ROM Checksum Error (Program)"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly*) • Main Board Assy (C533/C534 Main) *(p.146)* • Standard ROM-DIMM		
1	**Checking the Standard ROM-DIMM (EPL-6200 only)** Check to see if the mounted ROM-DIMM is exactly as specified and connected properly. (Remove once and then install again) ♦ Does the error still occur?	Go to Step 2	Problem solved
2	**Replacing the Standard ROM-DIMM (EPL-6200 only)** Replace the Standard ROM-DIMM. ♦ Does the error still occur?	Go to Step 3	Replace the faulty ROMDIMM
3	**Main Board Assy.** 1. Replace the Main Board Assy. ♦ Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

Note : The Main Board Assy and Memory Board Assy used with EPL-6200 and EPL-6200L are as listed below.
The Standard RAM is mounted on the Memory Board Assy (EPL-6200) or on the Main Board Assy (EPL-6200L).
For details, refer to "2.3.1 Operation Overview of the Main Control Circuit Board" *(p.94)*.

Parts Name	EPL-6200	EPL-6200L
Main Board Assy	*C533MAIN*	**C534MAIN**
Memory Board Assy (Steady production)	**C533PROG (C533PROG-C)**	

3.2.14 Option ROM Error

This error is an optional ROM fault.

Table 3-17. Troubleshooting for "Option ROM Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

CHECK POINT

EPL-6200/EPL-6200L is not available with any optional ROM and is not equipped with any free slot for optional ROM.

3.2.15 EEPROM Error

This error is an EEPROM fault.

Table 3-18. Troubleshooting for "EEPROM Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**EEPROM** Initialize EEPROM and check the operation. ♦Does the error still occur?	Go to Step 2	Problem solved
2	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

CHECK POINT

How to initialize EEPROM is as follows:

- **EPL-6200:**
  Turn on the power while pressing "Start/Stop" + "Job Cancel" + "Information".
- **EPL-6200L: (On the screen "Optional Settings" of printer driver)**
  Click the left button of the mouse while pressing [ALT]+[CTRL] +[SHIFT]+[W].
  (For details, refer to "EEPROM Initialization *(p.54)*")

3.2.16 Engine Initialization Error

Table 3-19. Troubleshooting for "Engine Initialization Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

3.2.17 Other Hardware Error

Table 3-20. Troubleshooting for "Other Hardware Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)*		
1	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

3.2.18 Software Error

Table 3-21. Troubleshooting for "Software Error"

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)*		
1	Reboot the host PC. ♦Does the error still occur?	Go to Step 2	Problem solved
2	**Driver** Install the driver again. ♦Does the error still occur?	Go to Step 3	Problem solved
3	**Main Board Assy.** 1. Replace the Main Board Assy. ♦Does the error still occur?	Go to "3.4.2 Electrical Noise" *(p.120)*	Replace the Main Board Assy.

3.3 Troubleshooting for Paper Jam

3.3.1 Initial Checking

If any paper jam has occurred, check the initial check items as listed below first.

Table 3-22. Initial Check Items

Check Item	Remedy
Is a specified type of paper used?	Replace the paper.
Is paper curled, wrinkled, or wet?	Replace the paper. Tell the customer how to store paper.
Is the paper path free from foreign matters, dirt or deformation?	Clean the paper path or replace relevant parts.
Is the Separation Claw free from dirt, deformation or wear?	Replace the fuser unit.
Are the rollers free from dirt, deformation or wear?	Clean or replace the relevant roller.
Is the paper size consistent with the restraint plates?	Ensure consistency.
Do the actuators operate normally?	Repair or replace the relevant actuator.

CHECK POINT

Open and close the Front Cover to reset the printer after correction of a paper jam.

3.3.2 Locations of Paper Jam Detection Sensors

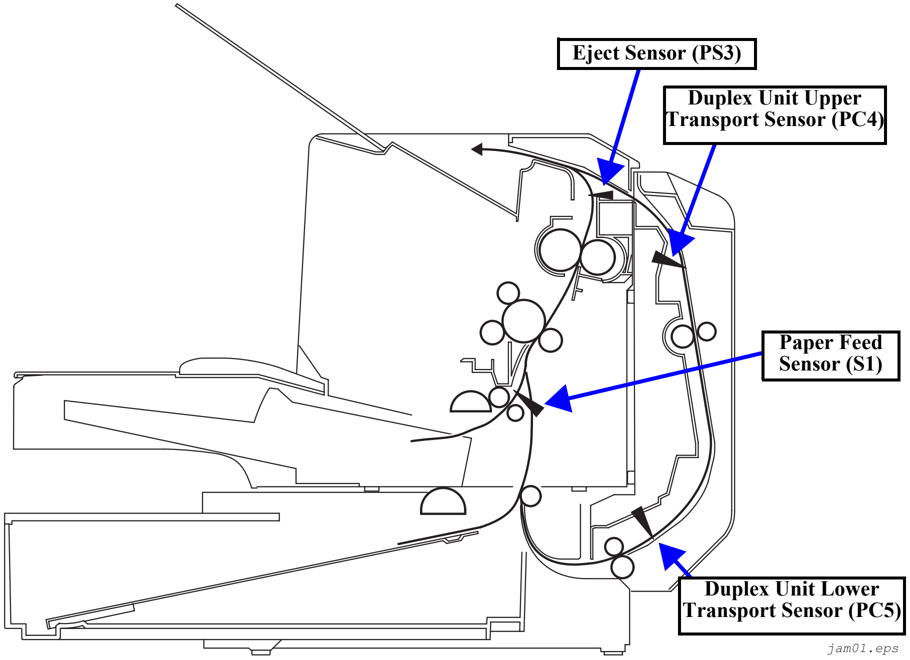

Eject Sensor (PS3)
Duplex Unit Upper Transport Sensor (PC4)
Paper Feed Sensor (S1)
Duplex Unit Lower Transport Sensor (PC5)
jam01.eps

Figure 3-3. EPL-6200 (with Optional Units installed)

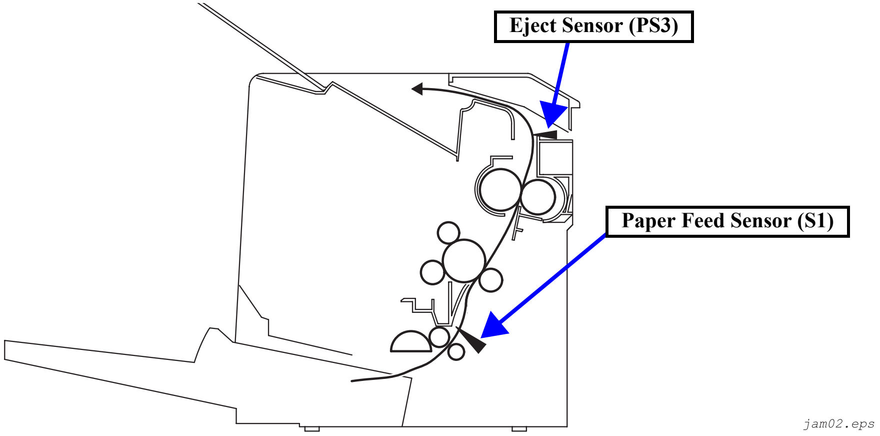

Eject Sensor (PS3)
Paper Feed Sensor (S1)
jam02.eps

Figure 3-4. EPL-6200L

3.3.3 Jam Detection Timing / Action to be Taken

3.3.3.1 Paper Feed Area Jam / Paper Transport Area Jam

☐ Detection Timing

Table 3-23. Paper Feed Area Jam / Paper Transport Area Jam

Category	Explanation
Jam detection in paper feed area	After start of paper feeding, the Paper Feed Sensor turned ON earlier than the passage of the predetermined time.
	The Paper Feed Sensor did not turn ON even after the passage of the predetermined period of time from start of paper feeding.
Paper eject area	After the Paper Feed Sensor turned ON, it turned OFF earlier than the passage of the predetermined time.
	The Paper Feed Sensor did not turn OFF even after the passage of the predetermined period of time from turning ON of the Paper Feed Sensor.
Remaining paper detection in paper feed area	After start of paper feeding, paper transport stopped before the Paper Feed Sensor turned OFF.
Remaining paper detection in paper eject area	The Paper Feed Sensor was ON at turning on of the Main Switch, at opening and closing of the front door, at occurrence of a paper jam or at stop of paper transport.
	At stop of paper transport, there is paper between the Paper Feed Sensor and the Paper Eject Sensor.

☐ Solution: Check the "*Initial Check Items*" *(p.116)* first and then replace the following components in the order named with new ones and repeat checking.

1. Paper Feed Solenoid *(p.157)*
2. Paper Feed Roller (Lower Cassette) *(p.161)*
3. Paper Feed Sensor (S1)
4. Eject Sensor (PS3)
5. Main Board Assy (C533/C534 Main) *(p.146)*

CHECK POINT

Before replacing any electrical part, check to see if the part in question is defective or not by consulting "3.5 Troubleshooting for Electrical Parts" *(p.121)*. **Then replace the part, if necessary.**

3.3.3.2 Fuser Area Jam / Paper Eject Area Jam

☐ Detection Timing

Table 3-24. Fuser Area Jam / Paper Eject Area Jam

Category	Explanation
Remaining paper detection in fuser area	The light to the Paper Eject Sensor was transmitted at turning on of the Main Switch, at opening and closing of the front door, at occurrence of a paper jam or at stop of paper transport.
Paper eject area	The light to the Paper Eject Sensor was transmitted earlier than the passage of the predetermined period of time from the turning on of the Paper Feed Sensor.
	The light to the Paper Eject Sensor was not transmitted even after the passage of the predetermined period of time from the turning on of the Paper Feed Sensor.
Paper eject area jam	The light to the Paper Eject Sensor was intercepted earlier than the passage of the predetermined period of time from the turning off of the Paper Feed Sensor.

☐ Solution: Check the "*Initial Check Items*" *(p.116)* first and then replace the following components in the order named with new ones and repeat checking.

1. Paper Feed Sensor (S1)
2. Eject Sensor (PS3)
3. Main Board Assy (C533/C534 Main) *(p.146)*

CHECK POINT

Before replacing any electrical part, check to see if the part in question is defective or not by consulting "3.5 Troubleshooting for Electrical Parts" *(p.121)*. **Then replace the part, if necessary.**

3.3.3.3 Transport Area Jam in Duplex Unit (Option)

☐ Detection Timing

Table 3-25. Transport Area Jam in Duplex Unit (Option)

Category	Explanation
Transport component jam	The Duplex Unit Upper Transport Sensor did not turn ON even after the passage of the predetermined period of time from interception of the light to the Paper Eject Sensor.

☐ Solution: Check the *"Initial Check Items" (p.116)* first and then replace the following components in the order named with new ones and repeat checking.

1. Eject Sensor (PS3)
2. Duplex Unit Upper Transport Sensor (PC4)
3. Main Board Assy (C533/C534 Main) *(p.146)*
4. Duplex Unit Control Board *(p.163)*

CHECK POINT

Before replacing any electrical part, check to see if the part in question is defective or not by consulting "3.5 Troubleshooting for Electrical Parts" *(p.121)*. **Then replace the part, if necessary.**

3.3.3.4 Paper Re-feed Area Jam in Duplex Unit (Option)

☐ Detection Timing

Table 3-26. Paper Re-feed Area Jam in Duplex Unit (Option)

Category	Explanation
Paper pre-feed area jam	The Paper Feed Sensor did not turn ON even after the passage of the predetermined period of time from start of paper re-feeding.
	The Paper Feed Sensor turned ON before the passage of the predetermined period of time from start of paper re-feeding.
Remaining paper detection in paper re-feed area	The Duplex Unit Upper Transport Sensor of Duplex Unit Lower Transport Sensor was ON at turning on of the Main Switch, at opening and closing of the Duplex Unit Cover, at occurrence of a paper jam or at stop of paper transport.

☐ Solution: Check the *"Initial Check Items" (p.116)* first and then replace the following components in the order named with new ones and repeat checking.

1. Eject Sensor (PS3)
2. Paper Feed Sensor (S1)
3. Duplex Unit Lower Transport Sensor (PC5)
4. Duplex Unit Control Board *(p.163)*
5. Main Board Assy (C533/C534 Main) *(p.146)*

CHECK POINT

Before replacing any electrical part, check to see if the part in question is defective or not by consulting "3.5 Troubleshooting for Electrical Parts" *(p.121)*. **Then replace the part, if necessary.**

3.4 Troubleshooting for Abnormal Operations

3.4.1 Power Cannot be Turned ON

Table 3-27. Troubleshooting for Impossible Power Turning On

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)* • Power Supply Unit (PU1) *(p.151)*		
1	**Connection of power cord** Check to see if the power cord is connected to the wall socket and the printer body properly. ♦ Does the error still occur?	Go to Step 2	Problem solved
2	**Broken or defective power cord** Replace the power cord. ♦ Does the error still occur?	Go to Step 3	Problem solved
3	**Fuses** Check the continuity of the fuses and replace the fuses, if blown. ♦ Does each of the fuses (F101 and F102) in the Power Supply Unit have a continuity?	Go to Step 4	Problem solved
4	**Main Board Assy.** 1. Replace the Main Board Assy. ♦ Does the error still occur?	Replace the power supply unit.	Replace the Main Board Assy.

3.4.2 Electrical Noise

Table 3-28. Troubleshooting for “Electrical Noise”

Step	Action and Question	Yes	No
	Parts below can be the source of this error (*Chapter 4 Disassembly and Assembly***)** • Main Board Assy (C533/C534 Main) *(p.146)* • Power Supply Unit (PU1) *(p.151)* • Fuser Unit *(p.152)* • High Voltage Unit (HV1) *(p.151)* • Photoconductor Unit *(p.135)* • Developer Cartridge *(p.135)* • Paper Cassette Unit Control Board *(p.162)* • Duplex Unit Control Board *(p.163)*		
1	**External noise** 1. Check to see if within 3 m from the printer there is another electrical apparatus, such as a generator, radio transmitter or an apparatus incorporating a motor. 2. Turn off the power to the electrical apparatus in question or move the printer to a position at least 6 m distant from the apparatus. ♦ Does the problem with electrical noise still occur?	Go to Step 2	Problem solved
2	**AC grounding** Check the AC power connection. ♦ Is the AC power cable connected and grounded properly?	Go to Step 3	Ask the customer for repair of the AC power connection.
3	**Grounding screw** Check the grounding screw of the AC Inlet. ♦ Is the cable grounded properly?	Go to Step 4	Install the grounding screw properly.
4	**Photoconductor Unit (Drum Cartridge)/Developer Cartridge (toner cartridge)** Replace the Photoconductor Unit or Developer Cartridge. ♦ Does the problem with electrical noise still occur?	Go to Step 5	Problem solved
5	**Continuity of cables** Check continuity of each cable. ♦ Does each cable have continuity?	Go to Step 6	Replace the defective cable.
6	**Grounding of circuit boards** Check grounding of circuit boards. ♦ Is grounding ensured?	Go to Step 7	Ensure grounding.
7	**Fuser unit** Replace the fuser unit. ♦ Does the problem still occur?	Go to Step8	Replace the fuser unit.
8	**High voltage unit** Replace the high voltage unit. ♦ Does the problem still occur?	Go to Step9	Replace the high voltage unit.
9	**Power supply unit** Replace the power supply unit. ♦ Does the problem still occur?	Go to Step10	Replace the power supply unit.
10	**Main Board Assy.** Replace the Main Board Assy. ♦ Does the problem still occur?	Replace all the relevant parts.	Problem solved

3.5 Troubleshooting for Electrical Parts

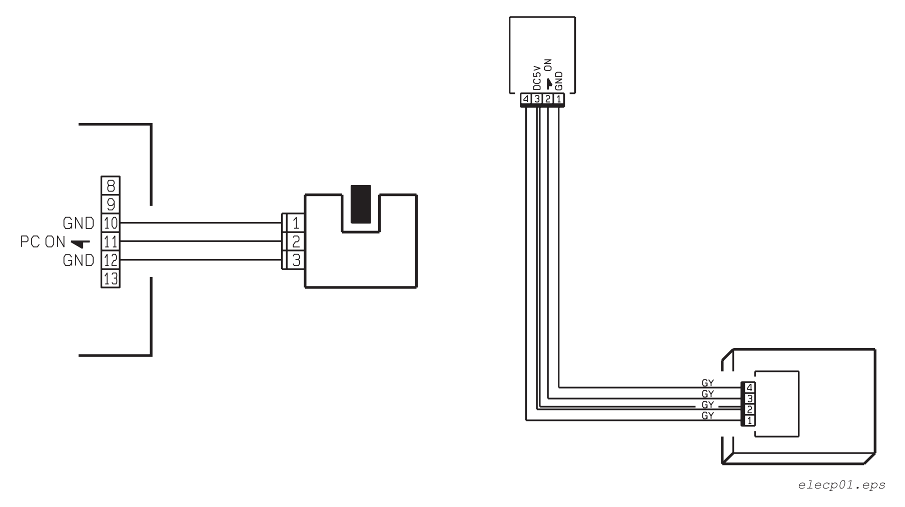
3.5.1 Checking Method for Electrical Parts

At occurrence of a paper jam or any other trouble, you can check the relevant electrical parts for their normality by the method as described below:

3.5.2 Sensors

Table 3-29. Troubleshooting for Sensors

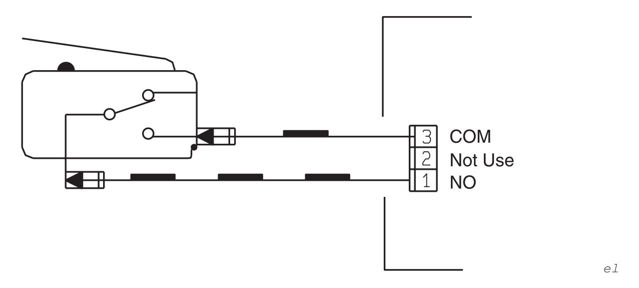
Step	Check Item	Solution
1	Does the input signal to Control Board change when light to the sensor is intercepted? (H→L, L→H)	Yes: Replace the Control Board No : Replace the sensor


DC5V
ON
GND
4 3 2 1
8
9
GND 10
PC ON 11
GND 12
13
1
2
3
GY
GY
GY
GY
4
3
2
1
elecp01.eps

3.5.3 Switches

Table 3-30. Troubleshooting for Switches

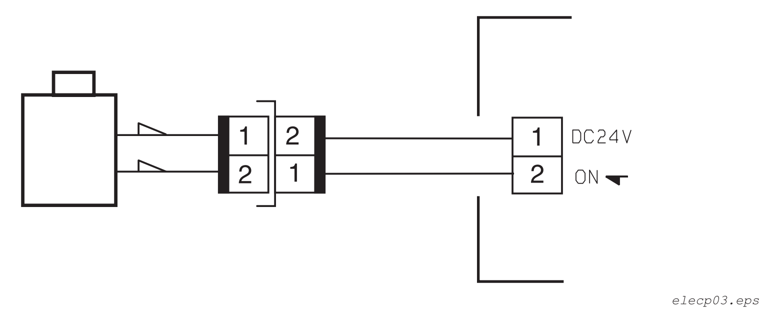
Step	Check Item	Solution
1	Does the input signal (NO) to Control Board turn L→H when the switch is turned on?	Yes: Replace the Control Board No : Replace the switch


3 COM
2 Not Use
1 NO
e1

3.5.4 Solenoids

Table 3-31. Troubleshooting for Solenoids

Step	Check Item	Solution
1	Does the output signal (NO) from Control Board turn H→L when the solenoid is turned on?	Yes: Replace the solenoid No : Replace the Control Board


1 2
2 1
1 DC24V
2 ON
elecp03.eps

3.5.5 Motors

Table 3-32. Troubleshooting for Motors 1

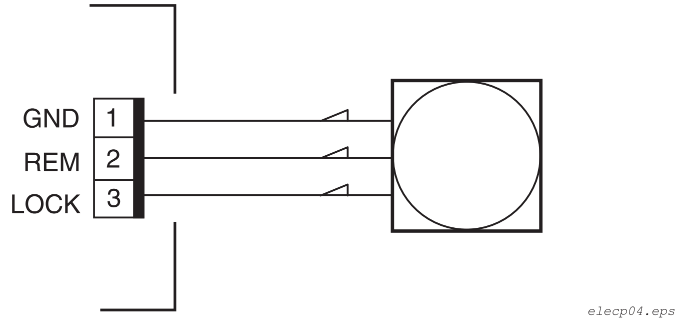
Step	Check Item	Solution
1	Is the LOCK signal on Control Board "H" when the printer is standing by?	No : Replace the Control Board Replace the motor
2	Does the REM signal on Control Board turn H→L when the motor is turned on?	Yes: Replace the motor
		No : Replace the Control Board
		

Table 3-33. Troubleshooting for Motors 2

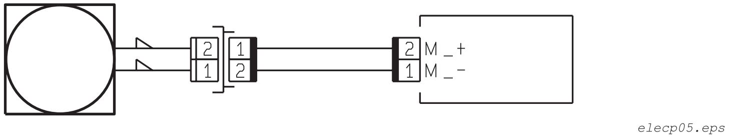
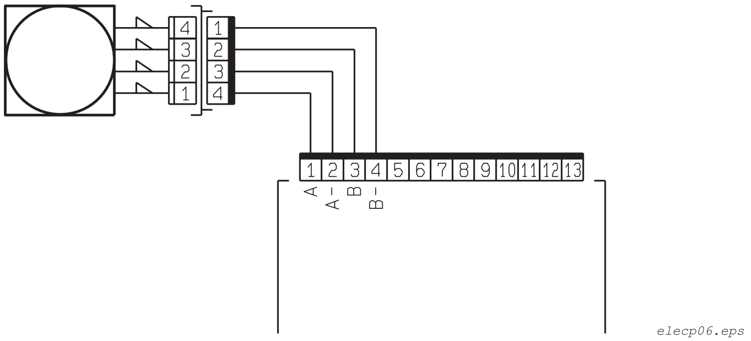
Step	Check Item	Solution
1	Does the input signal to Control Board turn H→L when the motor is turned on? (The input signal varies with the direction of rotation.)	Yes: Replace the motor
		No : Replace the Control Board
		

Table 3-34. Troubleshooting for Motors 3

Step	Check Item	Solution
1	Are the relay connector of the motor and the print jack on Control Board connected properly?	Yes: Replace the motor or Control Board
		No : Connect the connector and print jack properly
		

3.6 Troubleshooting for Print Quality Problems

If any print quality problem occurs, replace the Developer Cartridge (toner cartridge) and the Photoconductor Unit (Drum Cartridge) first, and determine whether the problem is caused by a cartridge or caused by the printer.

For a periodical print quality problem, measure the occurrence pitch of the abnormal image, and identify the abnormal component by referring to the table below.

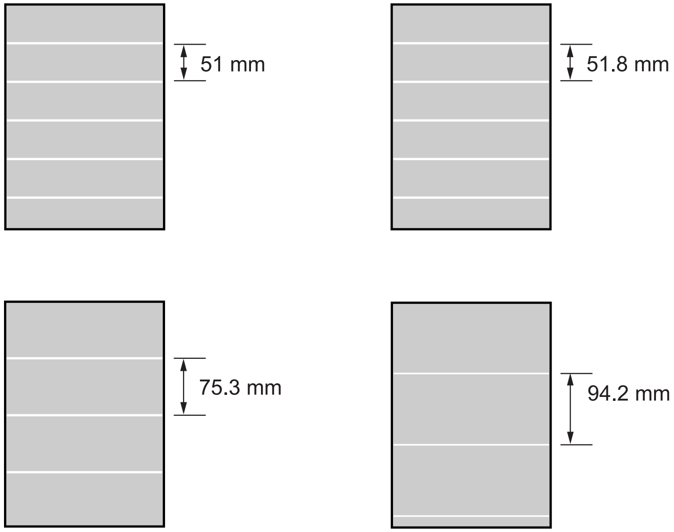
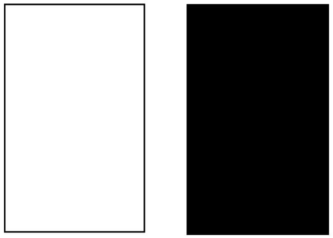


Figure 3-5. Pitch of Abnormal Print Image

Table 3-35. Relationship between Pitch and Cause

Pitch	Cause	Component to be Replaced (Page for Disassembly/Assembly)
50.6 mm	Transfer Roller is scratched or soiled	Transfer Roller *(p.136)*
51.8 mm	Flexible sleeve is scratched or soiled	Developer Cartridge *(p.135)*
75.3 mm	Pressure Roller is scratched or soiled	Fuser Unit *(p.152)*
94.2 mm	OPC drum is scratched, seamed or soiled	Photoconductor Unit *(p.135)*
	Fusing roller is scratched or soiled	Fuser Unit *(p.152)*

3.6.1 Blank Print or Solid Black



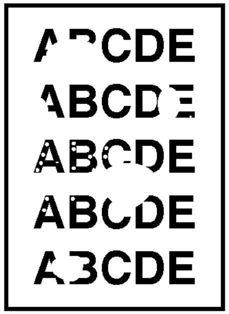
☐ Description of the problem:
Printed page is completely white or completely black.

☐ Parts that may be the source of this error

- PH Unit *(p.154)*
- Imaging Cartridge (Developer Cartridge / Photoconductor Unit) *(p.135)*
- High Voltage Unit (HV1) *(p.151)*
- Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	♦ Is the problem Blank Print (All White)?	Check connection of connector on the PH unit.	Go to Step 2
2	**Imaging Cartridge 1** ♦ Is the coupling of the Imaging Cartridge drive made properly?	Go to Step 3	Correct the drive transmission coupling or replace the Imaging Cartridge (Photoconductor Unit and Developer Cartridge).
3	**Imaging Cartridge 2** ♦ Are the charging voltage contact of the Imaging Cartridge and the OPC drum grounding contact set properly?	Go to Step 4	Check, clean or correct the contacts.
4	**High voltage unit (HV1)** ♦ Is the connector of the High Voltage Unit (HV1) connected properly?	Go to Step 5	Connect properly.
5	♦ Was the problem solved after any of the Steps above?	Problem solved	Replace the high voltage unit (HV1). Replace the Main Board Assy. Replace the PH unit.

3.6.2 White Out



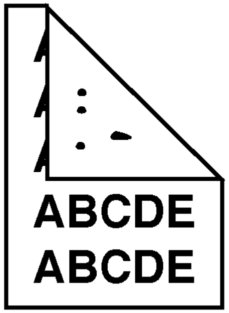
☐ Description of the problem:
In the image, there are extremely light areas or areas where image is completely missing.

☐ Parts that may be the source of this error

- Photoconductor Unit *(p.135)*
- Transfer Roller *(p.136)*
- High Voltage Unit (HV1) *(p.151)*
- Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	**Paper check** ♦Is the paper moist?	Set the paper taken from a newly opened package.	Go to Step 2
2	**Photoconductor roller** ♦Is the OPC drum scratched or seamed?	Replace the Photoconductor Unit.	Go to Step 3
3	**Checking the inside of printer** ♦Is there any foreign matter on the paper path?	Remove the foreign matter.	Go to Step 4
4	**Transfer roller** ♦Is the Transfer Roller scratched or soiled?	Replace the transfer roller.	Replace the high voltage unit (HV1). Replace the Main Board Assy.

3.6.3 Back of Paper Gets Dirty



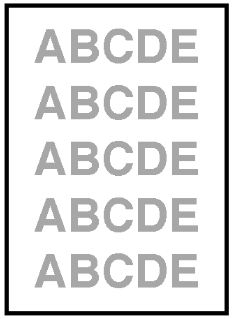
☐ Description of the problem:
The back side of the paper is soiled.

☐ Parts that may be the source of this error

- Fuser Unit *(p.152)*
- Transfer Roller *(p.136)*

Step	Action and Question	Yes	No
1	**Checking the inside of printer** ♦Is there any foreign matter on the paper path?	Remove the foreign matter.	Go to Step 2
2	**Fusing roller** ♦Is the fusing roller scratched or soiled?	Replace the Fuser Unit (fusing roller).	Go to Step 3
3	**Transfer roller** ♦Is the Transfer Roller scratched or soiled?	Replace the transfer roller.	

3.6.4 Low Image Density



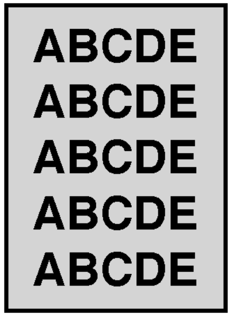
☐ Description of the problem:
Image density is too light as a whole.

☐ Parts that may be the source of this error

- ■ Developer Cartridge *(p.135)*
- ■ Photoconductor Unit *(p.135)*
- ■ Transfer Roller *(p.136)*
- ■ High Voltage Unit (HV1) *(p.151)*
- ■ Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	**Paper check** ♦Is the paper moist?	Set the paper taken from a newly opened package.	Go to Step 2
2	**Toner remaining** ♦Is there toner in the Developer Cartridge (toner cartridge)?	Go to Step 3	Replace the Developer Cartridge.
3	**Defective OPC drum (life has expired)** Replace the Photoconductor Unit. ♦Does the same error recur?	Go to Step 4	Replace the Photoconductor Unit.
4	**Defective development bias 1** Replace the high voltage unit. ♦Does the same error recur?	Go to Step 5	Replace the high voltage unit (HV1).
5	**Defective development bias 2** Replace the Main Board Assy. ♦Does the same error recur?	Go to Step 6	Replace Main Board.
6	**Improper transfer** Replace the transfer roller. ♦Does the same error recur?		Replace the transfer roller.

3.6.5 Foggy Background



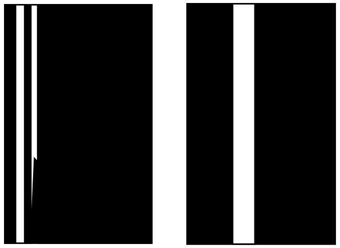
☐ Description of the problem:
Toner is present in some unexpected areas or over the whole page. Such areas appear fogged.

☐ Parts that may be the source of this error

- ■ Photoconductor Unit *(p.135)*
- ■ High Voltage Unit (HV1) *(p.151)*
- ■ Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	**OPC drum** ♦Is the OPC drum scratched or seamed?	Replace the Photoconductor Unit.	Go to Step 2
2	**Development bias contact terminal** ♦Is the development bias contact terminal in contact properly?	Go to Step 3	Clean the contact terminal and check the terminal location.
3	**PH window soiled** ♦Is the surface of the PH window soiled?	Clean	Go to Step 4
4	♦Was the problem solved after any of the Steps above?		Replace the high voltage unit (HV1). Replace the Main Board Assy.

3.6.6 White Stripes or White Bands



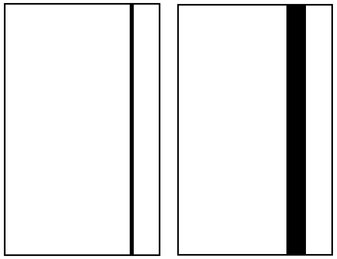
☐ Description of the problem:
There are light or completely white bands in the printed image. These bands are running parallel with paper-feed direction over a wide area.

☐ Parts that may be the source of this error

- Transfer Roller *(p.136)*
- Photoconductor Unit *(p.135)*
- Fuser Unit *(p.152)*
- Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	**Transfer roller** ♦ Is the Transfer Roller dented, scratched or soiled?	Replace the transfer roller.	Go to Step 2
2	**OPC drum** ♦ Is the OPC drum is scratched, seamed or soiled?	Replace the Photoconductor Unit.	Go to Step 3
3	**Fusing roller** ♦ Is the fusing roller scratched or soiled?	Replace the Fuser Unit (fusing roller).	Go to Step 4
4	**PH window soiled** ♦ Is the surface of the PH window soiled?	Clean	Go to Step 5
5	♦ Was the problem solved after any of the Steps above?	Problem solved	Replace the Main Board Assy.

3.6.7 Black Stripes or Black Bands



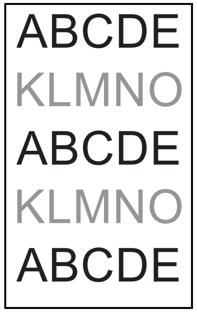
☐ Description of the problem:
Black stripes or bands are running parallel with the paper-feed direction.

☐ Parts that may be the source of this error

- Photoconductor Unit *(p.135)*
- Fuser Unit *(p.152)*
- Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	**Inside of the printer** ♦ Is the paper path soiled with toner?	Clean	Go to Step 2
2	**OPC drum** ♦ Is the OPC drum is scratched, seamed or soiled?	Replace the Photoconductor Unit.	Go to Step 3
3	**Fusing roller** ♦ Is the fusing roller scratched or soiled?	Replace the Fuser Unit (fusing roller).	Go to Step 4
4	♦ Was the problem solved after any of the Steps above?	Problem solved	Replace the Main Board Assy.

3.6.8 Offset Image



☐ Description of the problem:
Ghost image appears on the printed sheet. The image printed on the previous page or part of image printed on the current page appears again as a image.

☐ Parts that may be the source of this error

- Transfer Roller *(p.136)*
- Fuser Unit *(p.152)*
- Main Board Assy (C533/C534 Main) *(p.146)*

Step	Action and Question	Yes	No
1	**Fusing roller** ♦ Is the fusing roller scratched or soiled?	Replace the Fuser Unit (fusing roller).	Go to Step 2
2	**Transfer roller** ♦ Is the Transfer Roller scratched or soiled?	Replace the Transfer Roller.	Replace the Main Board Assy.

CHAPTER

4

DISASSEMBLY AND ASSEMBLY

4.1 Overview

This section describes procedures for disassembling the main components of the product. Unless otherwise specified, disassembly units or components can be reassembled by reversing the disassembly procedure. Things, if not strictly observed, that could result in injury or loss of life are described under the heading “Warning”. Precautions for any disassembly or assembly procedures are described under the heading “CAUTION”. Chips for disassembling procedures are described under the heading “CHECK POINT”.
If the assembling procedure is different from the reversed procedure of the disassembling, the procedure is described under the heading “REASSEMBLY”.
Any adjustments required after disassembling the units are described under the heading “ADJUSTMENT REQUIRED”. When you have to remove any units or parts that are not described in this chapter, refer to the exploded diagrams in the appendix.

Read precautions described in the next section before starting.

4.1.1 Precautions

See the precautions given under the heading “WARNING” and “CAUTION” in the following column when disassembling or assembling the product.

WARNING

- **Disconnect the power cable before disassembling or assembling the printer. If you need to work on the printer with power applied, strictly follow the instructions in this manual.**
- **Always wear gloves for disassembly and reassembly to avoid injury from sharp metal edges.**
- **To protect sensitive microprocessors and circuitry, use static discharge equipment, such as anti-static wrist straps, when accessing internal components.**
- **This printer incorporates a Class 3b laser diode, which emits an invisible laser beam. To avoid careless exposure to a laser beam, be sure to follow the instructions given in this manual when you do work with the printer.**
- **The FUSER ASSY and other high-temperature parts remain at hazardous temperature for a certain period of time even after stop of operation and turning off of the power. To prevent suffering a burn, be sure to wait after power turning off until the temperature of the parts cool down to a safe level, and then start working on the printer.**
- **To avoid dust explosion or ignition, never bring any consumables close to flame or throw them into fire.**
- **When developer or oil stuck to your skin or clothes, wipe it off with a dry cloth carefully and wash it away with water completely.**
- **Take great care not to put developer or toner contained in the consumables into your mouth or eye or not to inhale it. Take due care that no one around you put developer or toner into the mouth or eye or inhale it. (Spread a sheet of paper inside and around the printer to prevent soiling.)**

WARNING

Avant de commencer, assurez vous que l'imprimante soit eteinte et que le cordon d'alimentation soit debranche.

CAUTION

- **Use only recommended tools for disassembling, assembling or adjusting the printer.**
- **Observe the tightning torque when fixing screws.**
- **Apply lubricants and adhesives as specified. (See Chapter 6 for details.)**
- **Make the specified adjustments when you disassemble the printer. (See Chapter 5 for details.)**
- **Take following precautions when connecting or disconnecting flat cables.**
- **If the Photoconductor Unit (Drum Cartridge) is exposed to light for an extended period of time, it can undergo light fatigue, thus resulting in degradation of image. To avoid such trouble, when you have taken out the Imaging Cartridge, protect the Photoconductor Unit by covering it with a clean cloth for shading.**

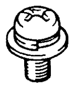
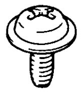
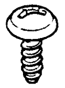
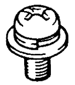
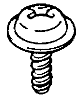
4.1.2 Tools

Use only specified tools to avoid damaging the printer.

Name	Commercial Availability	Code
Phillips screwdriver No. 1	Available	B743800100
Phillips screwdriver No. 2	Available	B743800500
Mini Phillips screwdriver	Available	-
Slotted screwdriver	Available	B743000100

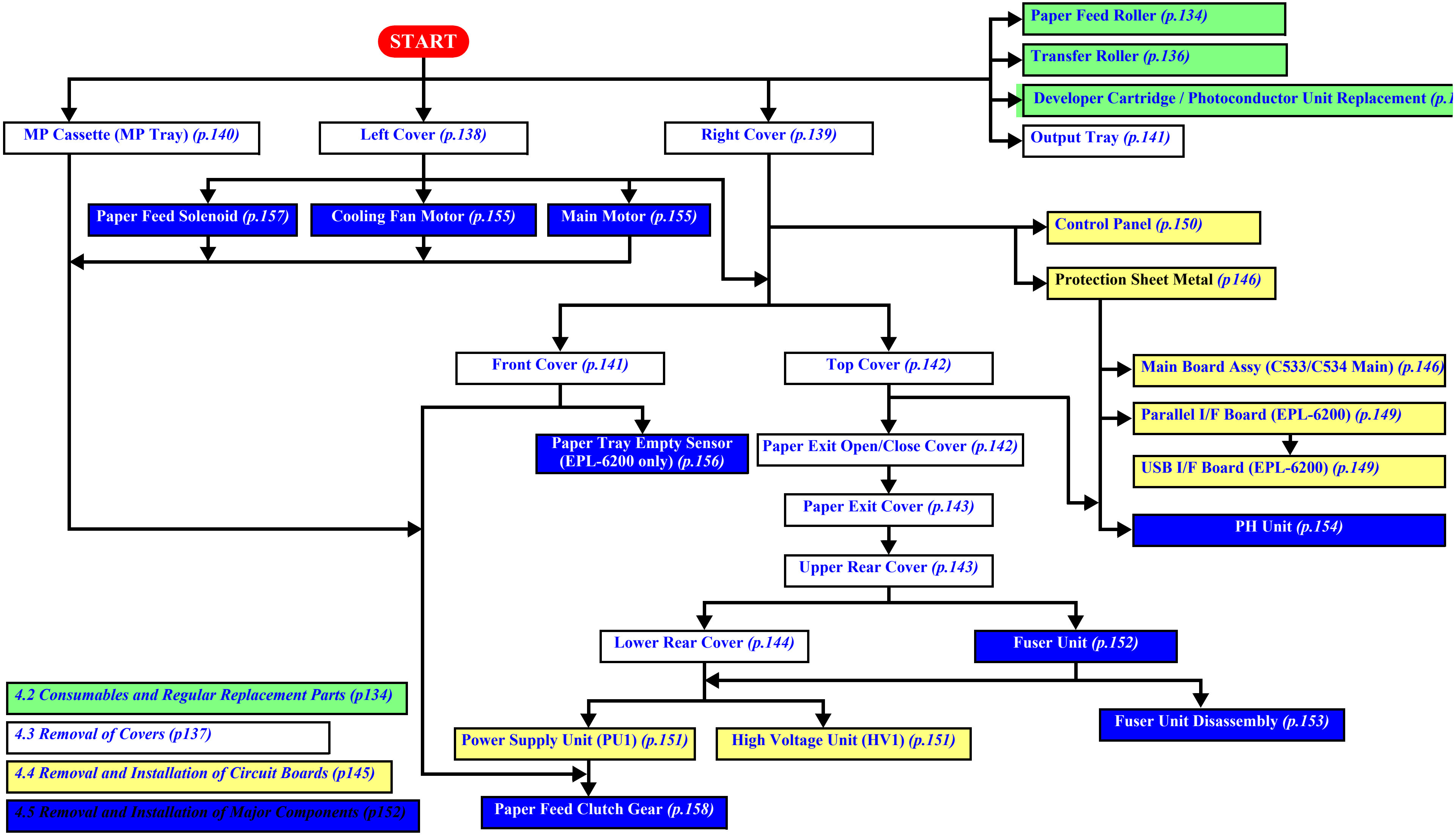
4.1.3 Screws

Table 4-1. Screws

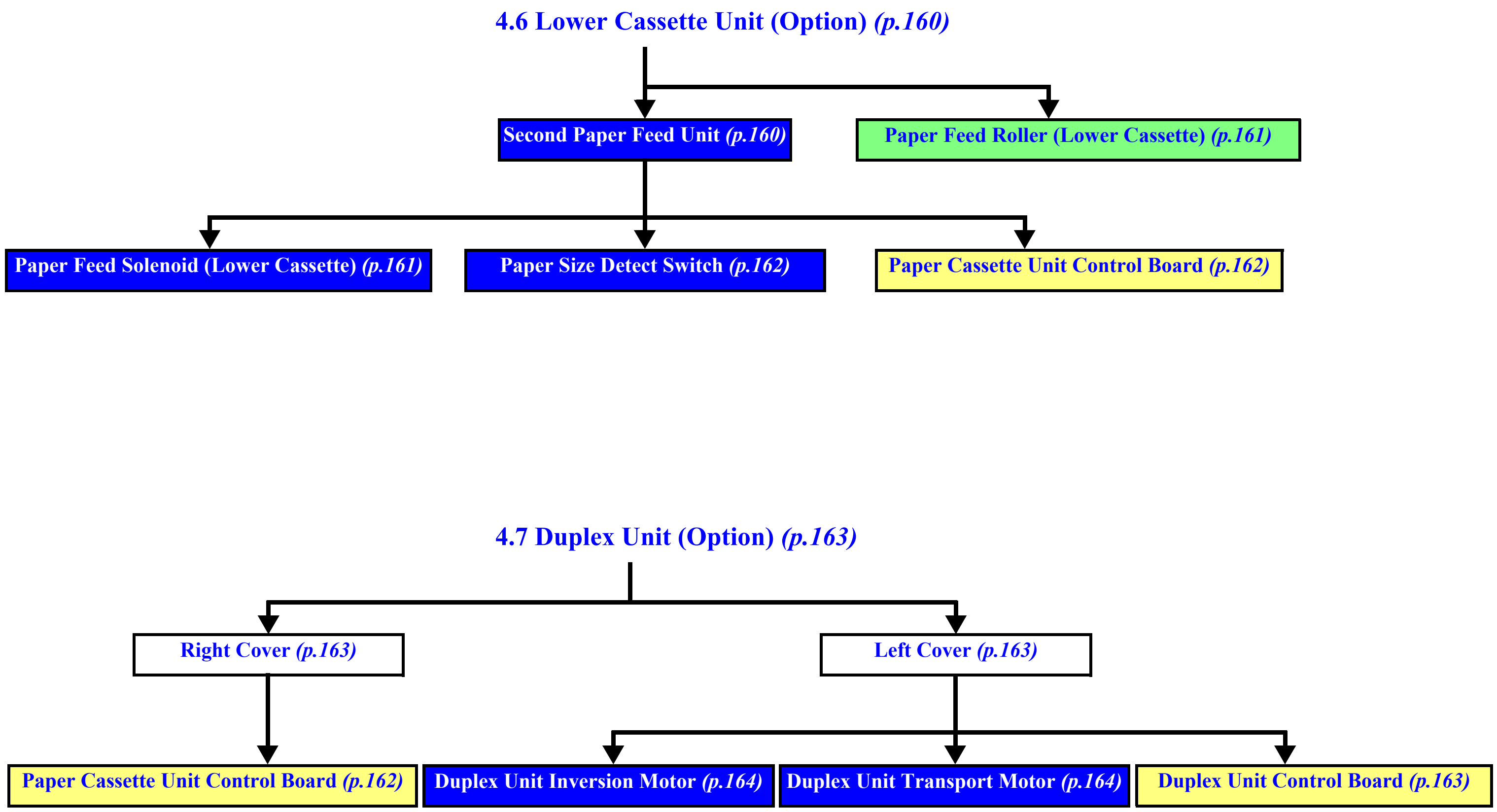
Ref. No.	Nominal Size	Name and Specification	Appearance
1305	3x6	+ Pan Head Screw - with Spring Washer and Plain Washer (Sems)	
1308	3x8		
3501	3x6	+ Cup Screw	
3504	3x8		
3907	3x8	+ Bind B-tite Screw	
1112	3x6	+ Bind S-tite Screw	
3704	3x8	+ Cup B-tite Screw	

4.1.4 Main Unit Disassembly

The flowchart below shows step-by-step disassembly procedure. When disassembling each component, refer to the page number shown in the figure.


START
MP Cassette (MP Tray) (p.140)
Left Cover (p.138)
Right Cover (p.139)
Paper Feed Roller (p.134)
Transfer Roller (p.136)
Developer Cartridge / Photoconductor Unit Replacement (p.1
Output Tray (p.141)
Paper Feed Solenoid (p.157)
Cooling Fan Motor (p.155)
Main Motor (p.155)
Control Panel (p.150)
Protection Sheet Metal (p146)
Front Cover (p.141)
Top Cover (p.142)
Main Board Assy (C533/C534 Main) (p.146)
Parallel I/F Board (EPL-6200) (p.149)
USB I/F Board (EPL-6200) (p.149)
Paper Tray Empty Sensor (EPL-6200 only) (p.156)
Paper Exit Open/Close Cover (p.142)
Paper Exit Cover (p.143)
PH Unit (p.154)
Upper Rear Cover (p.143)
Lower Rear Cover (p.144)
Fuser Unit (p.152)
Fuser Unit Disassembly (p.153)
Power Supply Unit (PU1) (p.151)
High Voltage Unit (HV1) (p.151)
Paper Feed Clutch Gear (p.158)
4.2 Consumables and Regular Replacement Parts (p134)
4.3 Removal of Covers (p137)
4.4 Removal and Installation of Circuit Boards (p145)
4.5 Removal and Installation of Major Components (p152)

Flowchart 4-1. Disassembly Flowchart


4.6 Lower Cassette Unit (Option) *(p.160)*
Second Paper Feed Unit *(p.160)*
Paper Feed Roller (Lower Cassette) *(p.161)*
Paper Feed Solenoid (Lower Cassette) *(p.161)*
Paper Size Detect Switch *(p.162)*
Paper Cassette Unit Control Board *(p.162)*
4.7 Duplex Unit (Option) *(p.163)*
Right Cover *(p.163)*
Left Cover *(p.163)*
Paper Cassette Unit Control Board *(p.162)*
Duplex Unit Inversion Motor *(p.164)*
Duplex Unit Transport Motor *(p.164)*
Duplex Unit Control Board *(p.163)*

Flowchart 4-2. Disassembly Flowchart of Option Unit

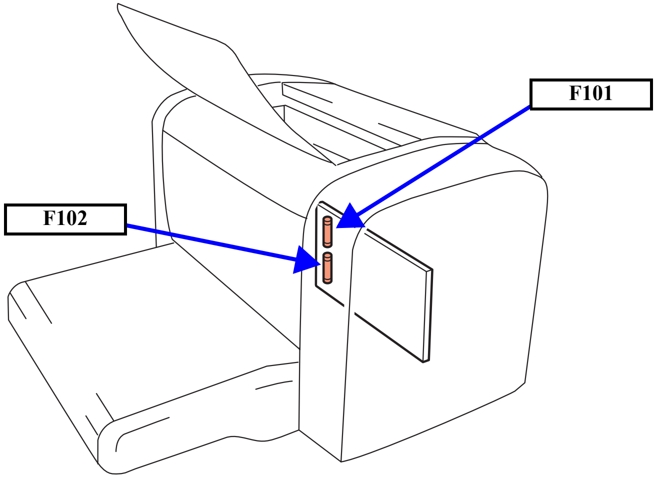
4.2 Consumables and Regular Replacement Parts

4.2.1 Locations of Fuses

The fuses used in this printer are as follows: *(See Figure 4-1)*

- F102: AC 125 V, 8 A
- F101: AC 125 V, 12 A

NOTE: *For removal of fuses, refer to "4.3.10 Lower Rear Cover (p.144)".*

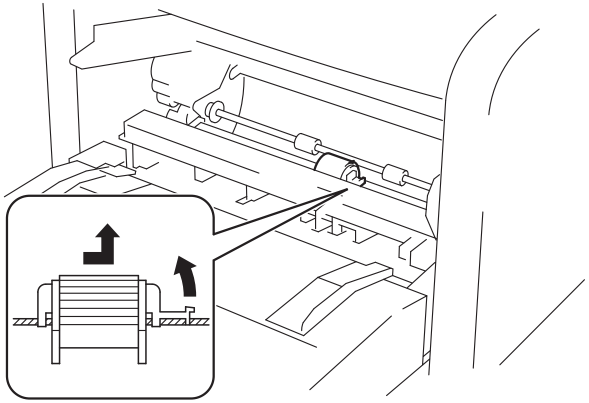


Fuse01.eps

Figure 4-1. Locations of Fuses

4.2.2 Paper Feed Roller

1. Remove the Imaging Cartridge.
2. Remove the Paper Feed Roller. *(See Figure 4-2)*



P_PFRoller01.eps

Figure 4-2. Paper Feed Roller Removal

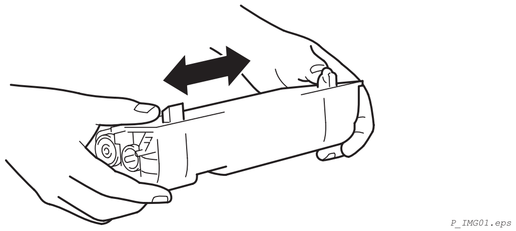
4.2.3 Developer Cartridge / Photoconductor Unit Replacement

CAUTION

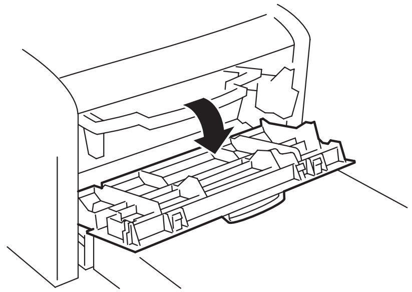
- **When you put the Developer Cartridge (toner cartridge) and Photoconductor Unit (Drum Cartridge) separated from each other on the floor or table, take care not to let toner fly apart.**
- **If you put the Developer Cartridge (toner cartridge) in an upright position and shake it strongly, toner may come out. Take care not to handle the Developer Cartridge in such a way.**
- **If the Photoconductor Unit (Drum Cartridge) is exposed to light for an extended period of time, it can undergo light fatigue, thus resulting in degradation of image. To avoid such trouble, when you have taken out the Imaging Cartridge, protect the Photoconductor Unit by covering it with a clean cloth for shading.**
  In addition, do not this work under any strong light source.

CHECK POINT

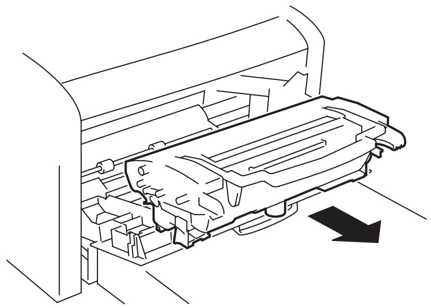
For replacing the Developer Cartridge (toner cartridge), swing adequately the new Developer Cartridge horizontally beforehand to stir the toner. (To minimize the possibility of light fatigue of the Photoconductor Unit.)



1. Open the Front Cover, and take out the Imaging Cartridge from the printer.
2. Turn the lever of the Developer Cartridge (toner cartridge) in the direction as shown and separate the Developer Cartridge and the Photoconductor Unit from each other.
3. Replace the Developer Cartridge or Photoconductor Unit with a new one.
4. Install the Developer Cartridge on the Photoconductor Unit.
5. Install the Imaging Cartridge in the printer.



Opening the Front Cover



Removing the Imaging Cartridge

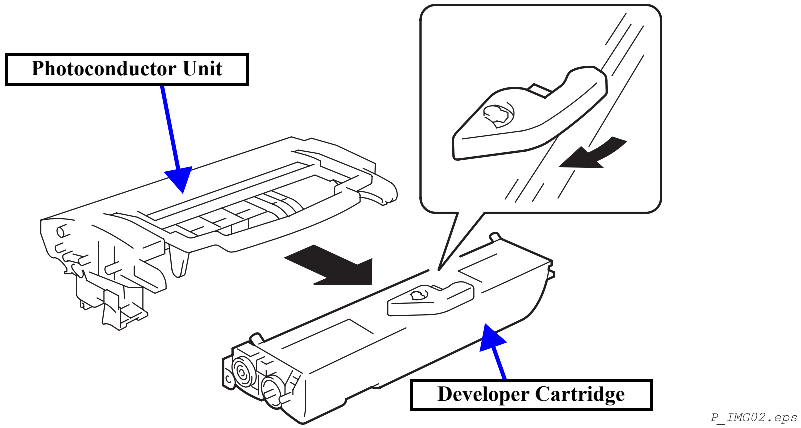


Figure 4-3. Replacing the Developer Cartridge / Photoconductor Unit

4.2.4 Transfer Roller

CAUTION

- **Do not touch the surface of the Transfer Roller nor stain it with chemicals or toner, for the dents or dirt on the surface of the Transfer Roller badly affects the print quality.**
- **When handling the Transfer Roller, hold the shaft of the roller or the shaft supports.**
- **Do not place any new Transfer Roller directly on the floor.**

1. Remove the Imaging Cartridge.
2. *Remove the Fuser Unit. (p.152)*

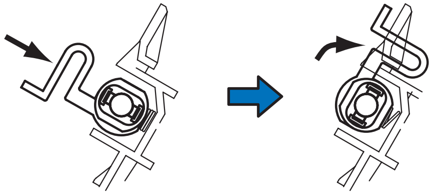
CHECK POINT

The Transfer Roller can be removed singly. However, you are advised to remove the Fuser Unit beforehand for easy removal of the Transfer Roller.

3. Push down each lever of the right and left shaft supports (white) for the Transfer Roller toward the front, and remove the Transfer Roller from the Transfer Roller Holder. *(See Figure 4-4)*
4. Remove the right and left shaft supports and the gear from the removed Transfer Roller, and install them on the new Transfer Roller. *(See Figure 4-5)*

Reassembly

In installation, insert the Transfer Roller in the Transfer Roller Holder of the printer body, and raise the lever of each shaft support.


P_TRoller03.eps

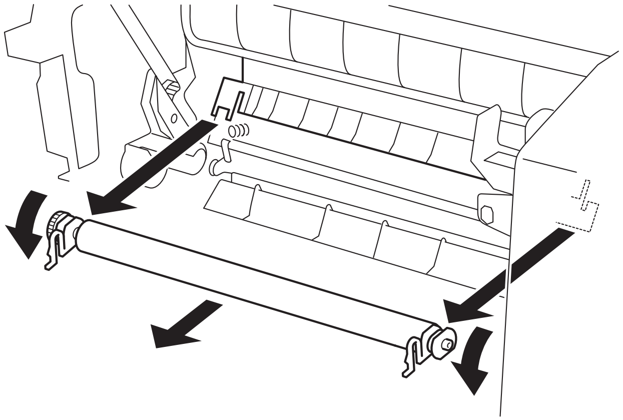

P_TRoller01.eps

Figure 4-4. Transfer Roller Removal 1

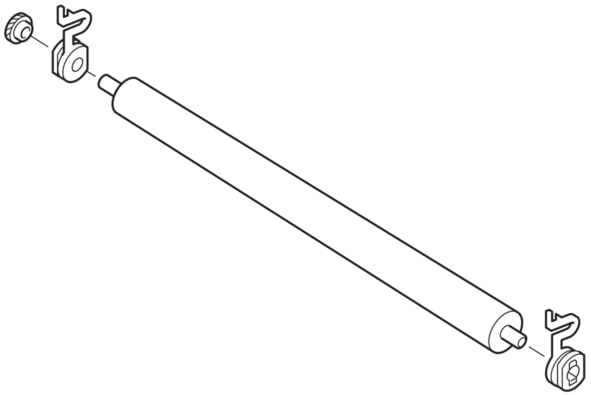

P_TRoller02.eps

Figure 4-5. Transfer Roller Removal 2

4.3 Removal of Covers

Table 4-2. Covers

No.	Names	Refer to
1	Paper Exit Cover	*p.143*
2	Right Cover	*p.139*
3	MP Cassette (MP Tray)	*p.140*
4	Front Cover	*p.141*
5	Top Cover	*p.142*
6	Output Tray	*p.141*
7	Left Cover	*p.138*
8	Paper Exit Open/Close Cover	*p.142*

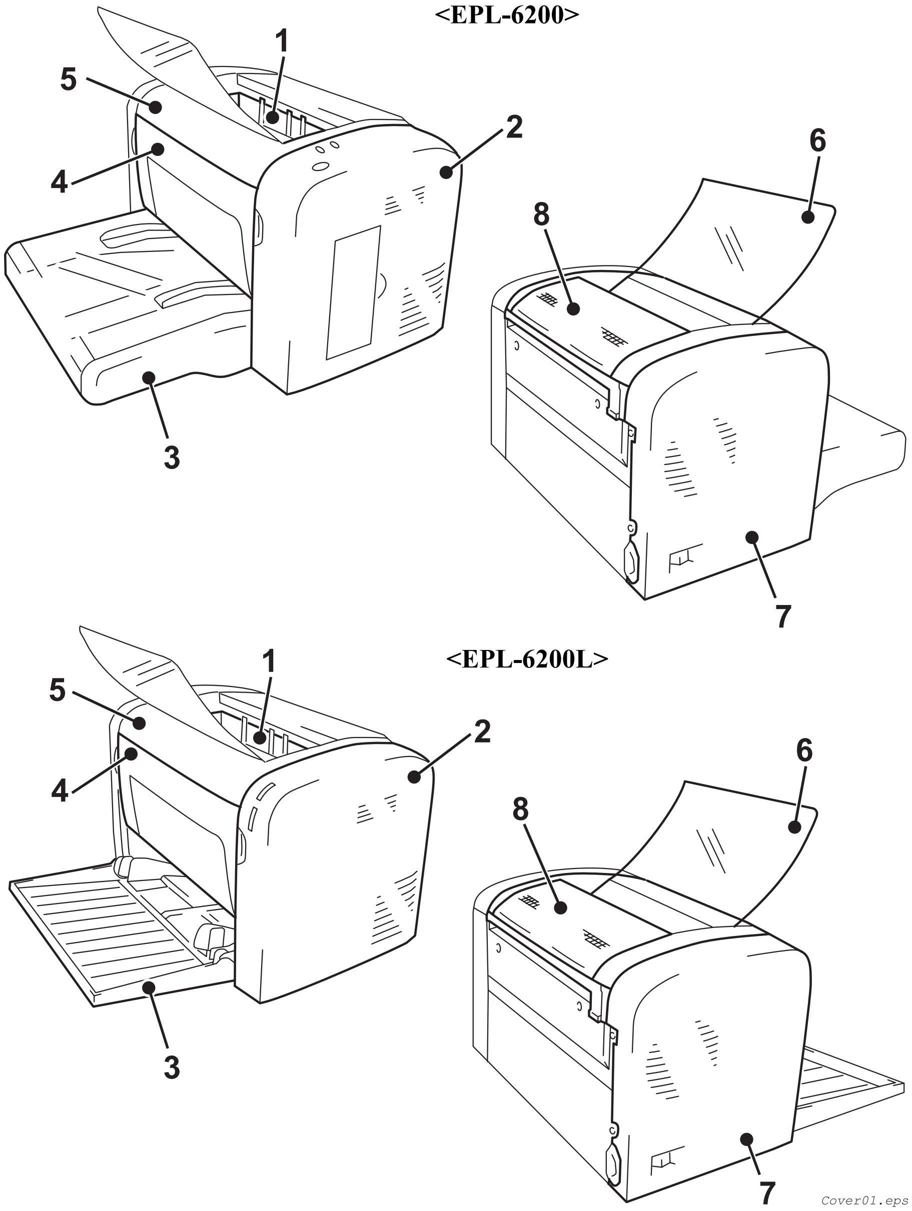


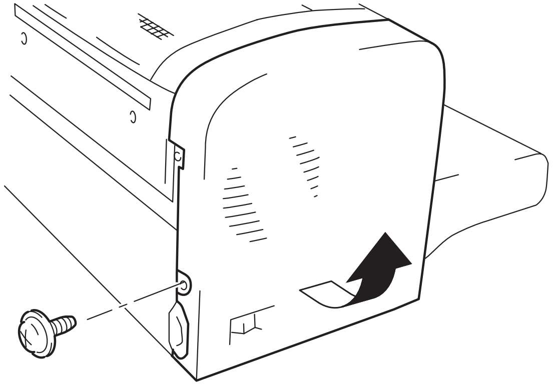
Figure 4-6. Covers

4.3.1 Left Cover

1. Remove the screw (x1) at the rear of the printer. *(See Figure 4-7)*
2. Release the hook at the front bottom of the printer.*(See Figure 4-8)*
3. With attention paid to the two hooks at the cover top (Top Cover), lift and remove the Left Cover from the printer. *(See Figure 4-7)*

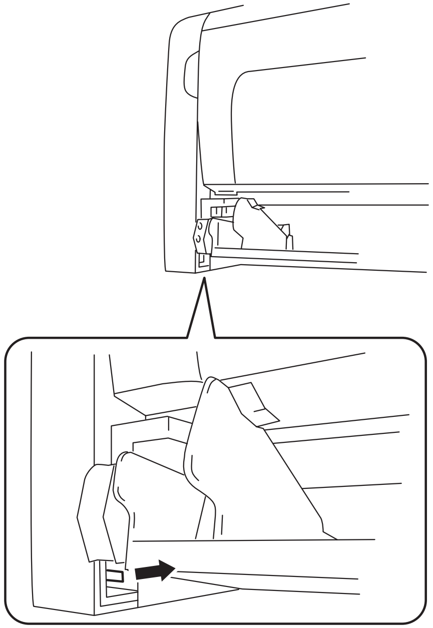
CAUTION

When you remove the Left Cover, be sure to release the hook shown in Figure 4-8 beforehand. The hook, if not released, can be broken during removal of the Left Cover.



Cover_L01.eps

Figure 4-7. Left Cover Removal



Cover_L02.eps

Figure 4-8. Releasing the Hook

4.3.2 Right Cover

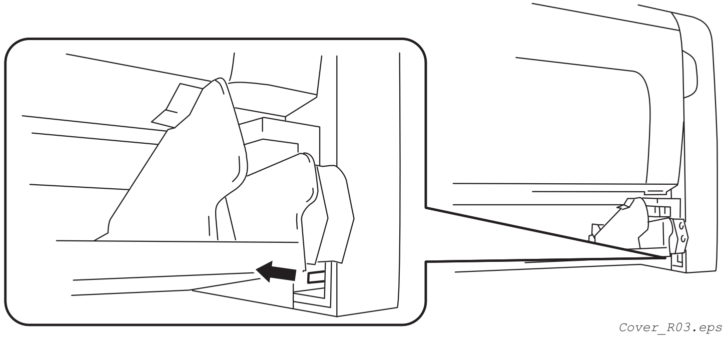
<EPL-6200>

1. Remove the Memory Slot Cover.
2. Remove the three screws, and remove the Right Cover. *(See Figure 4-9)*
3. Disconnect the one connector.

<EPL-6200L>

CAUTION

When you remove the Right Cover, be sure to release the hook shown below beforehand. The hook, if not released, can be broken during removal of the Right Cover.



1. Remove the screw (x1) at the rear of the printer. *(See Figure 4-10)*
2. Release the hook at the front bottom of the printer.
3. With attention paid to the two hooks at the cover top (Top Cover), lift and remove the Right Cover from the printer.
4. Disconnect the one connector.

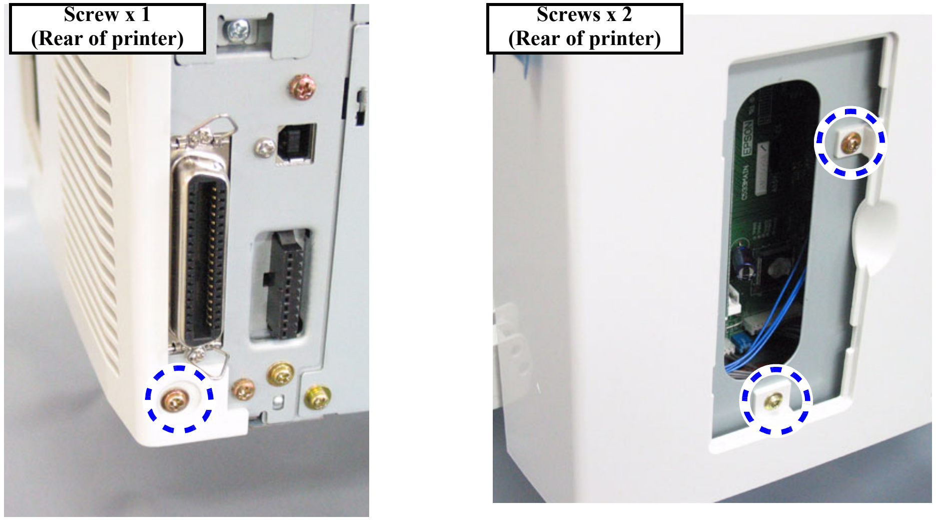


Figure 4-9. Right Cover Removal (EPL-6200)

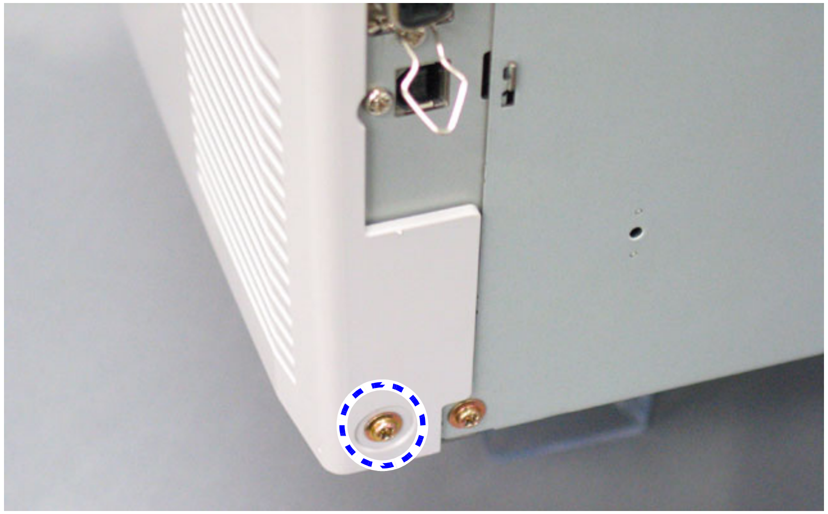


Figure 4-10. Right Cover Removal (EPL-6200L)

4.3.3 MP Cassette (MP Tray)

<EPL-6200>

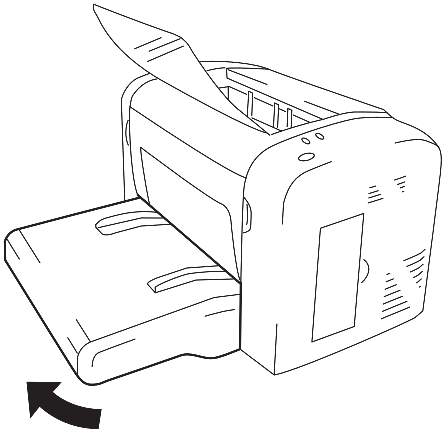
1. While holding down the printer body with your hand, lift and remove the paper feed tray. *(See Figure 4-11)*

<EPL-6200L>

1. Close the MP Tray.
2. Remove the MP Tray while pushing one side outward. *(See Figure 4-12)*

CHECK POINT

You can remove the MP Tray easily if you remove the Right and Left Covers beforehand.



Cover_Ca01.eps

Figure 4-11. Removing the MP Cassette

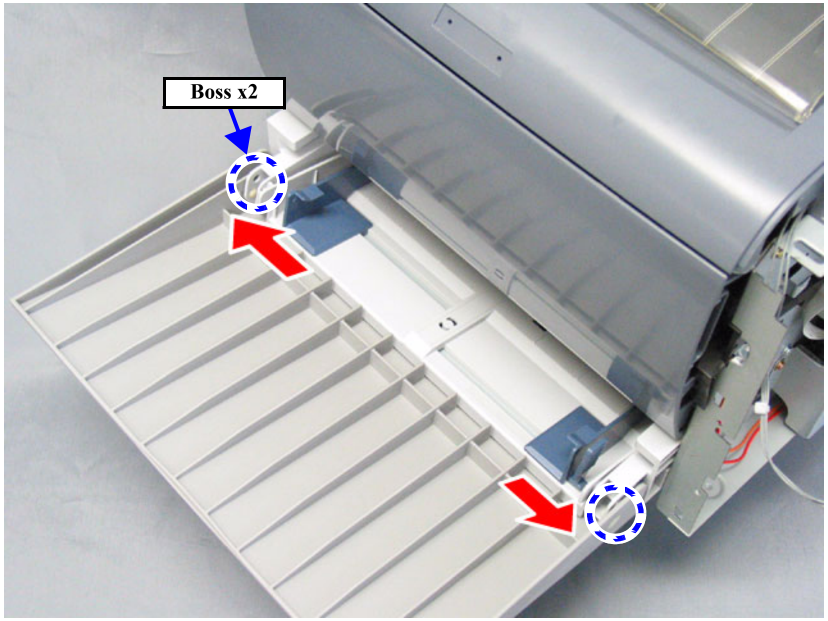


Figure 4-12. Removing the MP Tray

4.3.4 Front Cover

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. Open the Front Cover.
4. Remove the Front Cover while pushing one side inward. *(See Figure 4-13)*

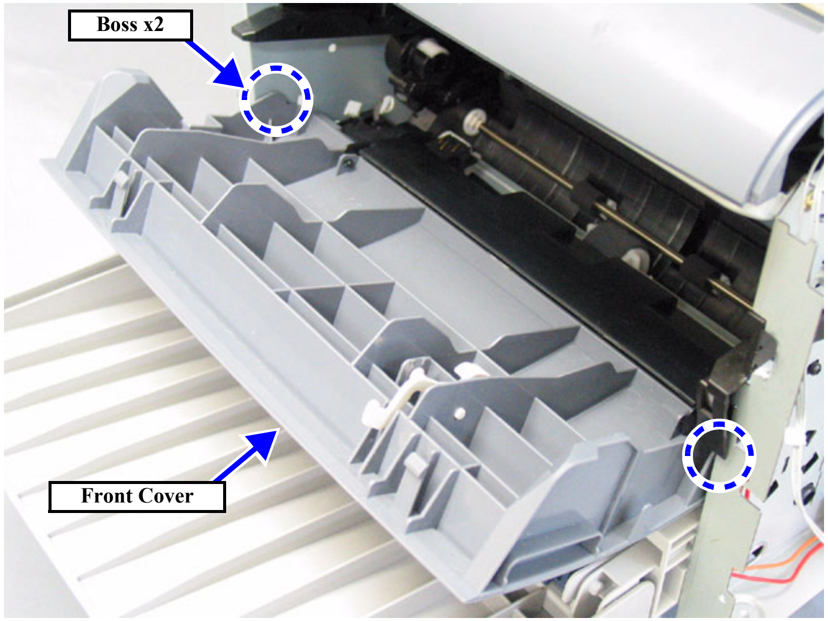
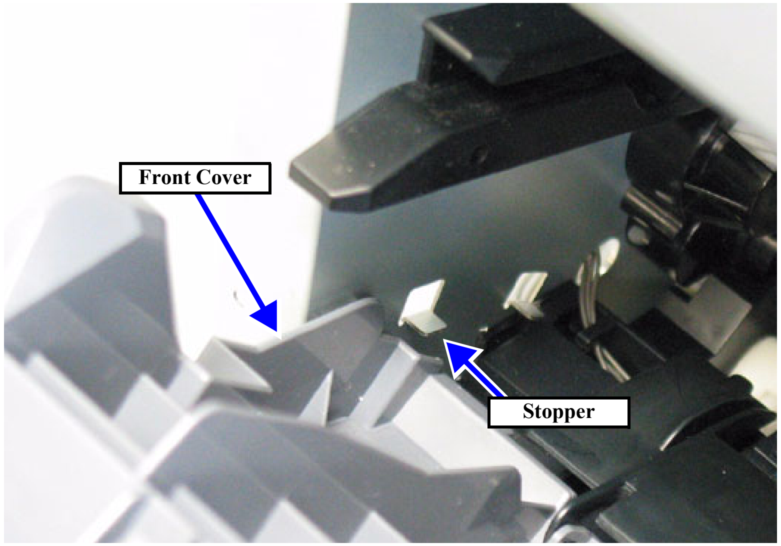


Figure 4-13. Front Cover Removal

Reassembly

Install the Front Cover so that the Front Cover is located below the stoppers on the right and left frames of the printer.



4.3.5 Output Tray

1. Open the Output Tray.
2. Remove the Output Tray while pushing both ends inward. *(See Figure 4-14)*

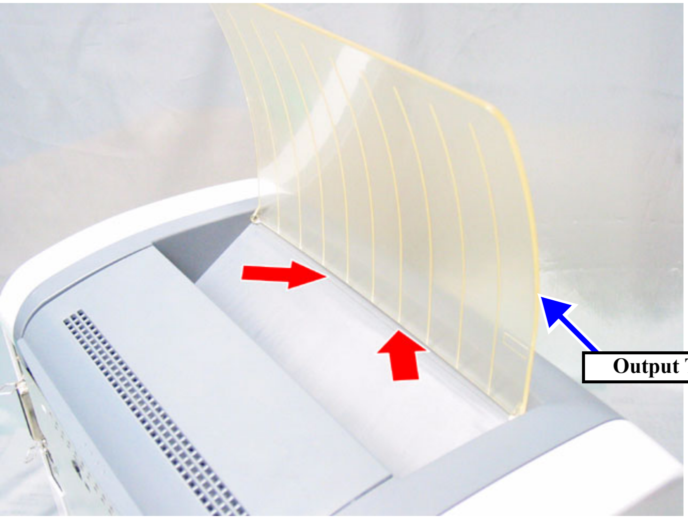


Figure 4-14. Removing the Output Tray

4.3.6 Top Cover

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. Open the Paper Exit Open/Close Cover.
4. Release the four hooks of the right and left printer frames.
5. Remove the Top Cover. *(See Figure 4-15)*

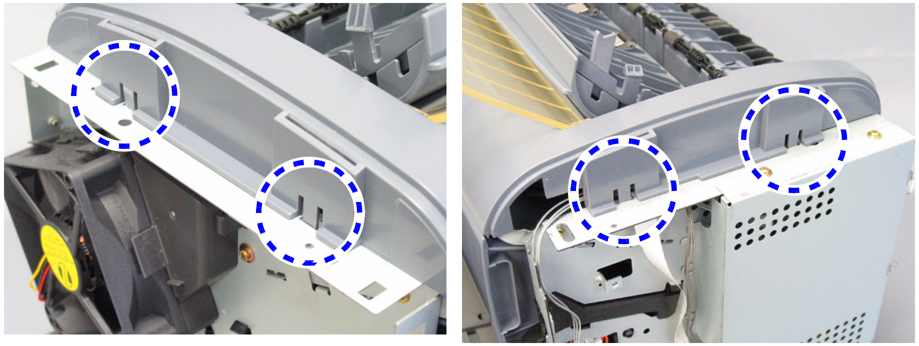


Figure 4-15. Top Cover Removal

4.3.7 Paper Exit Open/Close Cover

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. Turn the Paper Exit Cover by 90 degrees, and remove the Paper Exit Cover from the right and left shaft holders. *(See Figure 4-16)*

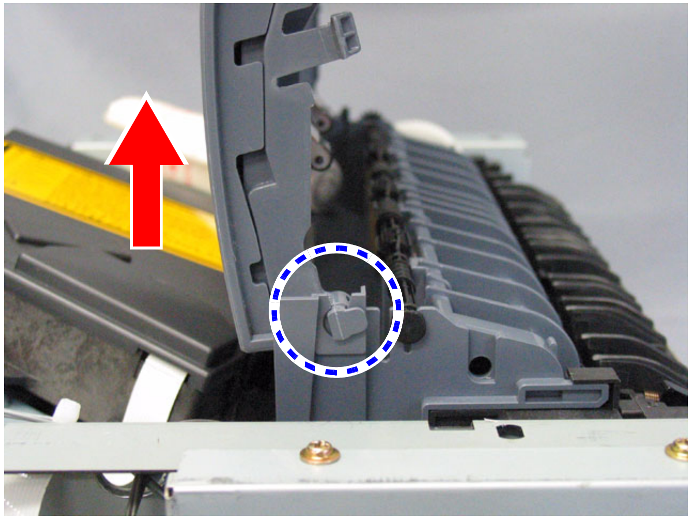


Figure 4-16. Removing the Paper Exit Open/Close Cover

4.3.8 Paper Exit Cover

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Open/Close Cover. (p.142)*
5. While pushing the right and left hooks (two hooks) at the rear of the printer inward, slide the Paper Exit Cover toward the front and remove it. *(See Figure 4-17)*

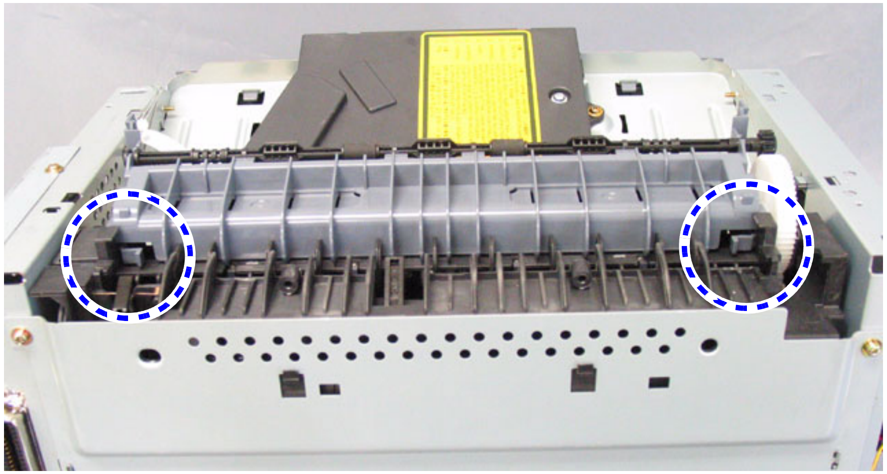
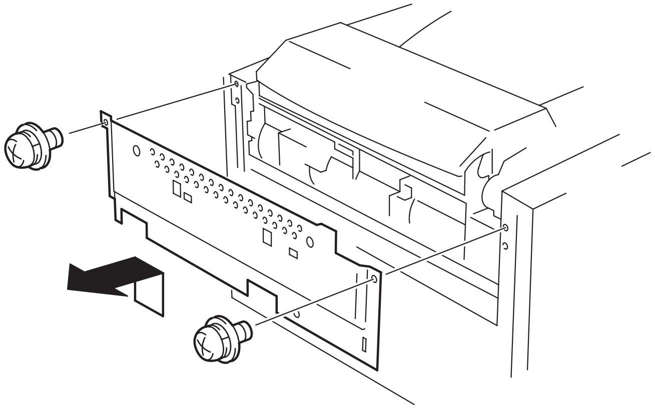


Figure 4-17. Removing the Paper Exit Cover

4.3.9 Upper Rear Cover

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Cover. (p.143)*
5. Remove the screw and two washers at the rear of the printer securing the Upper Rear Cover.
6. Release the four hooks by lifting the Upper Rear Cover, and remove the Upper Rear Cover from the printer body. *(See Figure 4-18)*



Cover_RU01.eps

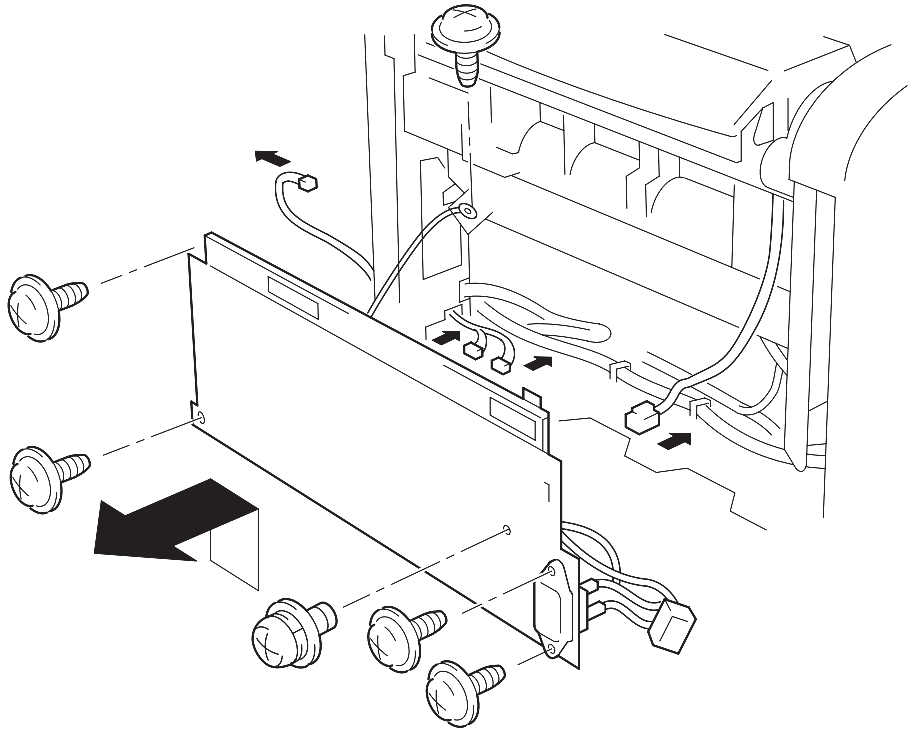
Figure 4-18. Removing the Upper Rear Cover

4.3.10 Lower Rear Cover

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Cover. (p.143)*
5. *Remove the Upper Rear Cover. (p.143)*
6. Remove the two screws securing the Lower Rear Cover, the one screw on the IF side securing the High Voltage Unit (HV1) and the two screws securing the AC Inlet.
7. Release the two hooks by lifting the Lower Rear Cover, and remove the Lower Rear Cover from the printer body.
8. Remove the one screw securing the grounding wire on the High Voltage Unit (HV1).
9. Disconnect the connector (CN807) on the Main Board.
10. Disconnect the connector (CN3) on the Power Supply Unit (PU1).
11. Disconnect the connector (CN1) on the High Voltage Unit (HV1).
12. Remove the one screw securing the grounding wire of the AC Inlet to the printer frame.
13. Remove the Power Switch at the side of the printer body while releasing the right and left hooks (two hooks).

CAUTION

On the Rear cover, the High Voltage Unit (HV1) and Power Supply Unit (PU1) are installed and thus many connectors are connected. Therefore, take due care when removing the Rear Cover.



Cover_RL01.eps

Figure 4-19. Removing the Lower Rear Cover

4.4 Removal and Installation of Circuit Boards

WARNING

- **Disconnect the power cable before disassembling or assembling the printer. If you need to work on the printer with power applied, strictly follow the instructions in this manual.**
- **To protect sensitive microprocessors and circuitry, use static discharge equipment, such as anti-static wrist straps, when accessing internal components.**

Table 4-3. Circuit Boards

Names		Refer to
Main Board Assy (C533/C534 Main)		*p.146*
Parallel I/F Board (EPL-6200)		*p.149*
USB IF Board (EPL-6200)		*p.149*
Control Panel	EPL-6200	*p.146*
	EPL-6200L	*p.148*
Power Supply Unit		*p.151*
High Voltage Unit		*p.151*

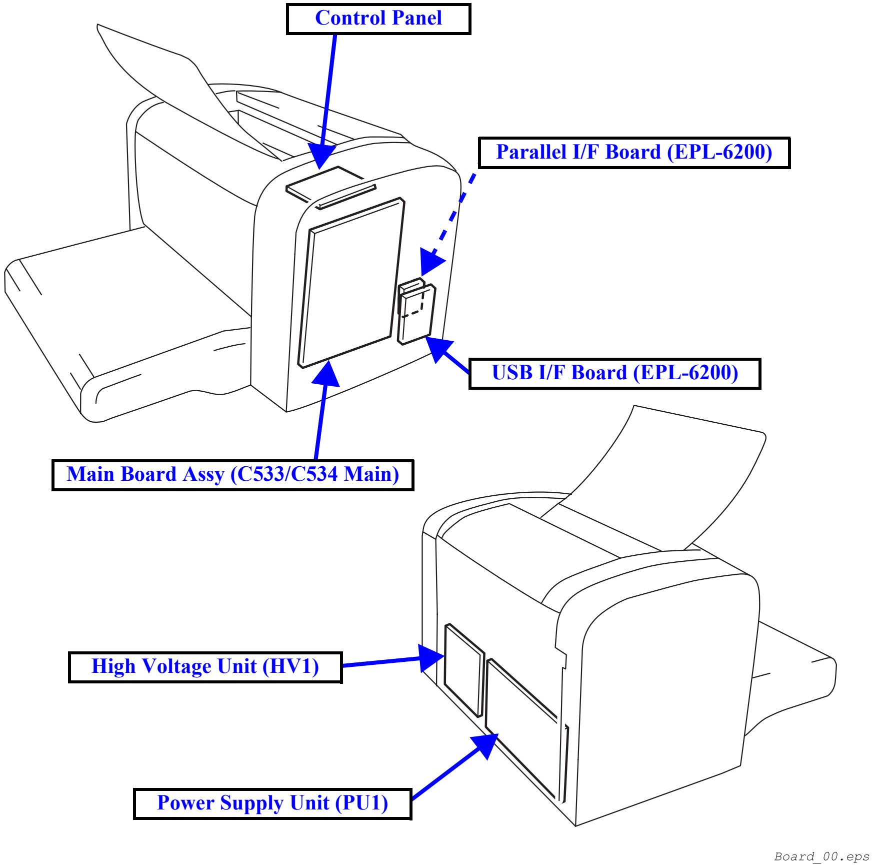

Control Panel
Parallel I/F Board (EPL-6200)
USB I/F Board (EPL-6200)
Main Board Assy (C533/C534 Main)
High Voltage Unit (HV1)
Power Supply Unit (PU1)
Board_00.eps

Figure 4-20. Circuit Boards

4.4.1 Main Board Assy (C533/C534 Main)

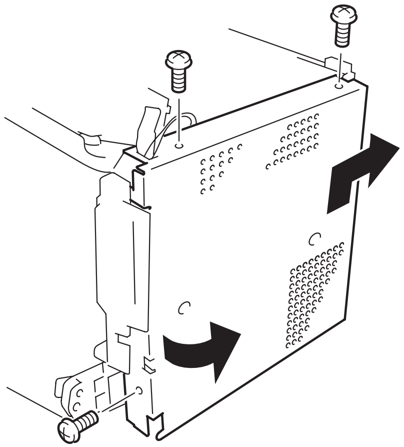
CAUTION

Take care not to break the flat cable.
When installing the Main Board Assy, pay attention to the orientation of the terminal side and insert the board into the inmost depth properly.

4.4.1.1 EPL-6200 (C533 Main)

1. *Remove the Right Cover. (p.139)*
2. Remove the three screws, and remove the protection sheet metal. *(See Figure 4-21)*
3. At the rear of the printer, remove the two screws and remove the TYPE-B slot cover. *(See Figure 4-22)*
4. Remove the TYPE-B guide rail.

(Continued to next page)



`Board_Main01.eps`

Figure 4-21. Removing the Protection Sheet Metal (EPL-6200)

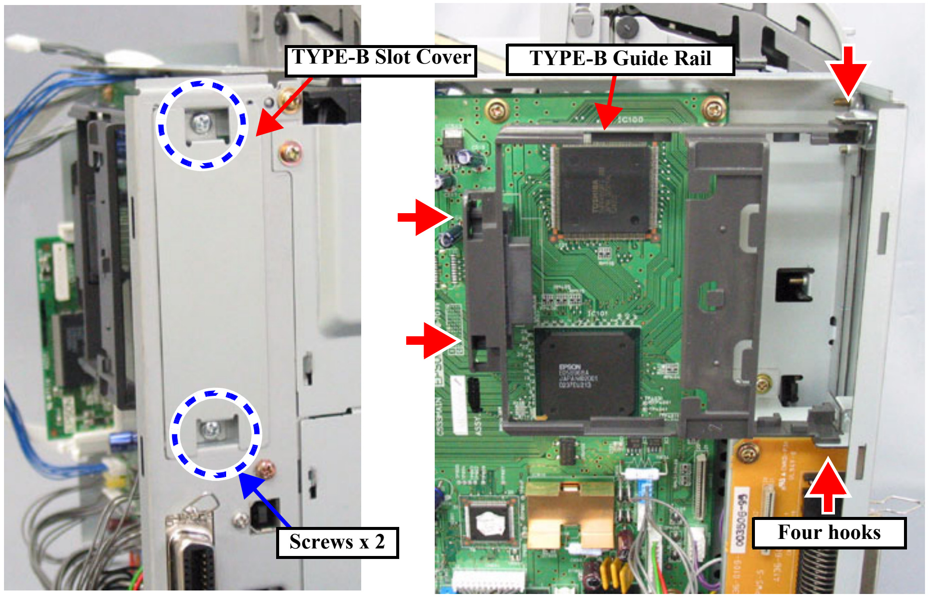
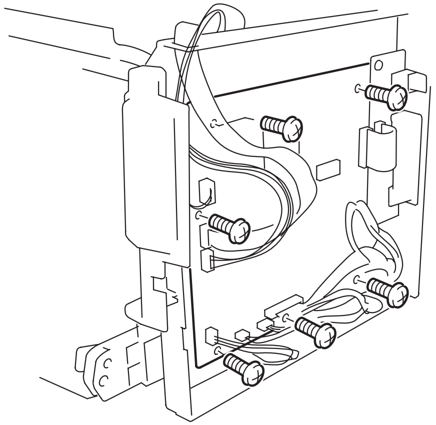


Figure 4-22. Removing the TYPE-B Slot Cover and Guide Rail

5. Disconnect all the connectors and flat cables on the Mechanical Control Board.
6. Remove the six screws, and remove the C533 Main. *(See Figure 4-22)*

Table 4-4. Connectors

CN No.	Pins	Color	Connected to	Remarks
403	21	–	Parallel I/F Board	FFC
404	4	White	USB I/F Board	
405	12	White	Control Panel	
802	2	Blue	Fuser Unit	
803	2	White	Paper Feed Solenoid	
804	12	White	High Voltage Unit (CN1)	
805	10	–	PH Unit	FFC
806	4	White	Main Motor	
807	7	Black	Power Supply Unit (CN2)	
808	3	Black	Fuser Unit	
809	5	White	PH Unit	
810	2	White	Paper Jam Sensor	
811	11	White	Lower Cassette Unit	
812	3	Yellow	MP Tray Empty Sensor	
813	3	White	Cooling Fan	
815	10	White	Duplex Unit Connector	
816	3	Blue	Cartridge Sensor	



Board_Main03.eps

Figure 4-23. Removing the C533 Main (EPL-6200)

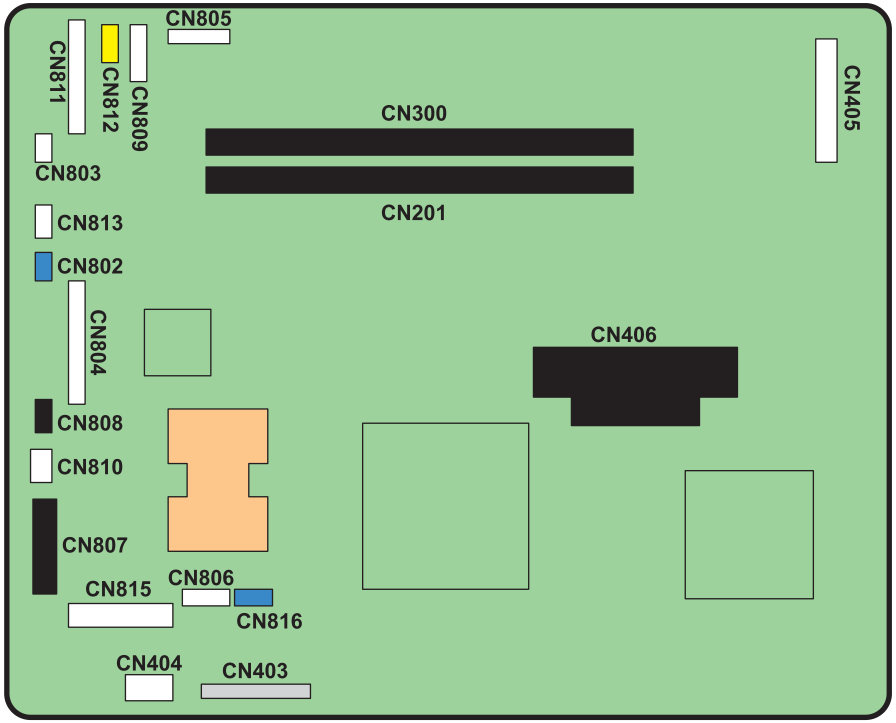
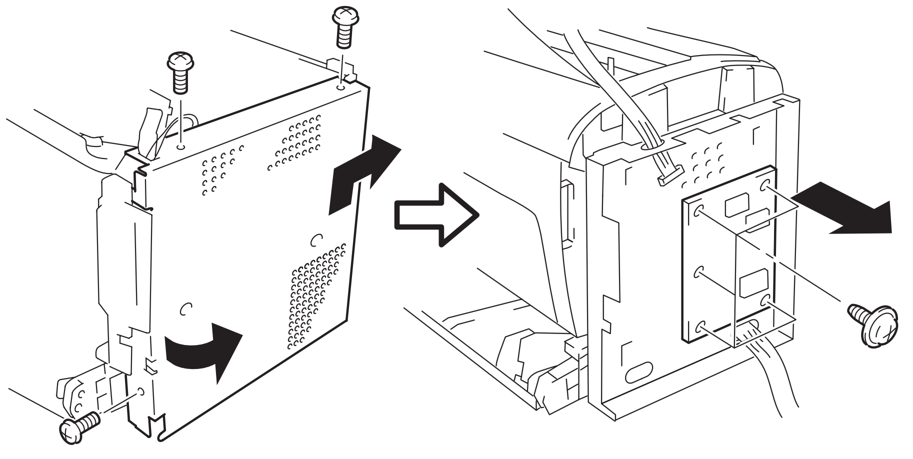

CN805
CN811
CN812
CN809
CN405
CN300
CN803
CN201
CN813
CN802
CN804
CN406
CN808
CN810
CN807
CN815
CN806
CN816
CN404
CN403

Figure 4-24. Connector Locations on C533 Main

4.4.1.2 EPL-6200L (C534 Main)

1. *Remove the Right Cover. (p.139)*
2. Remove the three screws, and remove the protection sheet metal. *(See Figure 4-25)*
3. Disconnect all the connectors and flat cables on the Mechanical Control Board.
4. Remove the three screws at the rear of the printer rear on the I/F side.
5. Remove the five screws, and remove the C534 Main.

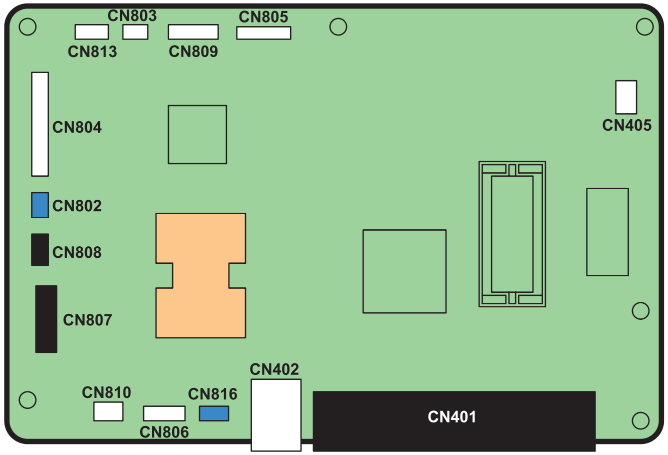


Board_Main02.eps

Figure 4-25. Removing the C534 Main (EPL-6200L)

Table 4-5. Connectors

CN No.	Pins	Color	Connected to	Remarks
405	3	White	Panel (LED)	
802	2	Blue	Fuser Unit	
803	2	White	Paper Feed Solenoid	
804	12	White	High Voltage Unit (CN1)	
805	10	-	PH Unit	FFC
806	4	White	Main Motor	
807	7	Black	Power Supply Unit (CN2)	
808	3	Black	Fuser Unit	
809	5	White	PH Unit	
810	2	White	Paper Jam Sensor	
813	3	White	Cooling Fan	
816	3	Blue	Cartridge Sensor	



C534Main02.eps

Figure 4-26. Connector Locations on C534 Main

4.4.2 Parallel I/F Board (EPL-6200)

1. *Remove the Right Cover. (p.139)*
2. Remove the three screws, and remove the protection sheet metal. *(See Figure 4-21)*
3. At the rear of the printer, remove the two screws on the I/F side. *(See Figure 4-27)*
4. Disconnect the FFC and remove the two screws, and then remove the Parallel I/F Board.

4.4.3 USB I/F Board (EPL-6200)

1. *Remove the Right Cover. (p.139)*
2. Remove the three screws, and remove the protection sheet metal. *(See Figure 4-21)*
3. *Remove the Parallel I/F Board (EPL-6200). (p.149)*
4. Disconnect the connector (CN815) for the Duplex Unit from the Main Board.
5. Remove the two screws, and remove the I/F frame. *(See Figure 4-28)*
6. At the rear of the printer, remove the one screw on the I/F side.
7. Disconnect the connector (CN404) from the Main Board.
8. Remove the two screws, and remove the USB I/F Board.

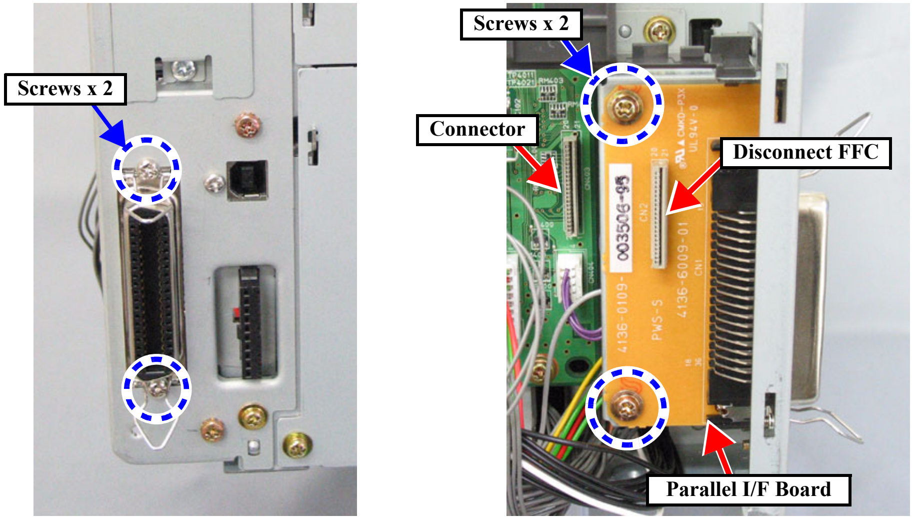

Screws x 2
Screws x 2
Connector
Disconnect FFC
Parallel I/F Board

Figure 4-27. Removing the Parallel I/F Board

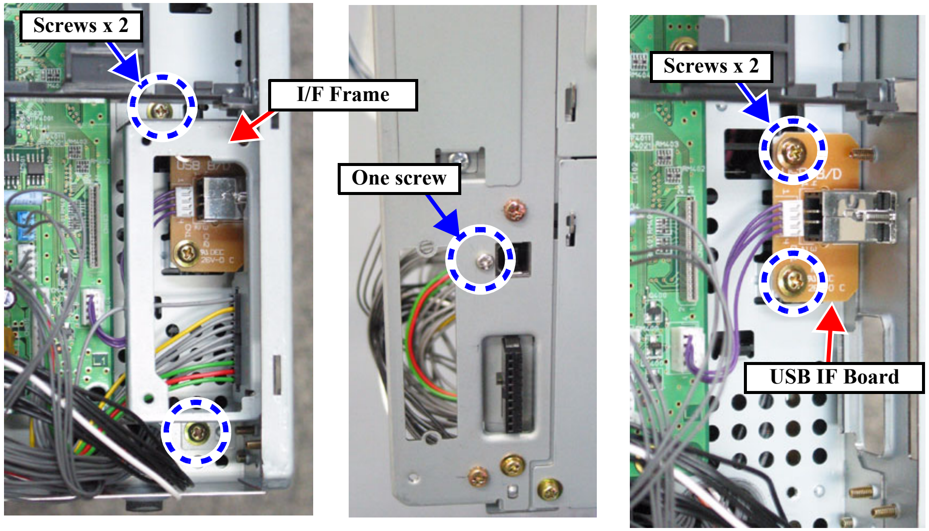

Screws x 2
I/F Frame
One screw
Screws x 2
USB IF Board

Figure 4-28. Removing the USB I/F Board

4.4.4 Control Panel

<EPL-6200>

1. *Remove the Right Cover. (p.139)*
2. Remove the three screws, and remove the protection sheet metal and the Control Panel. *(See Figure 4-29)*

<EPL-6200L>

1. *Remove the Right Cover. (p.139)*
2. Remove the two screws, and remove the Control Panel Assy. *(See Figure 4-30)*
3. Remove the one screw, and remove the Control Panel.

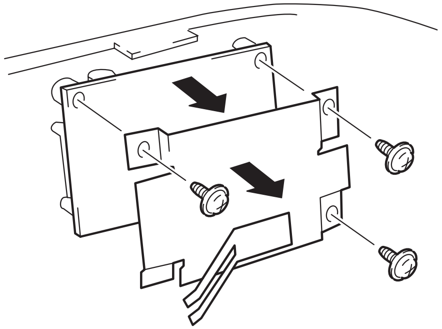


Figure 4-29. Control Panel Removal (EPL-6200)

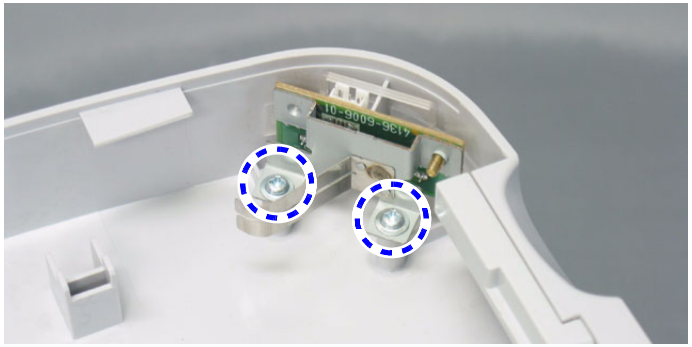


Figure 4-30. Control Panel Removal (EPL-6200L)

4.4.5 Power Supply Unit (PU1)

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Cover. (p.143)*
5. *Remove the Upper Rear Cover. (p.143)*
6. *Remove the Fuser Unit. (p.152)*
7. *Remove the Lower Rear Cover. (p.144)*
8. Remove the four screws, and remove the Power Supply Unit (PU1) from the Lower Rear Cover. *(See Figure 4-31)*

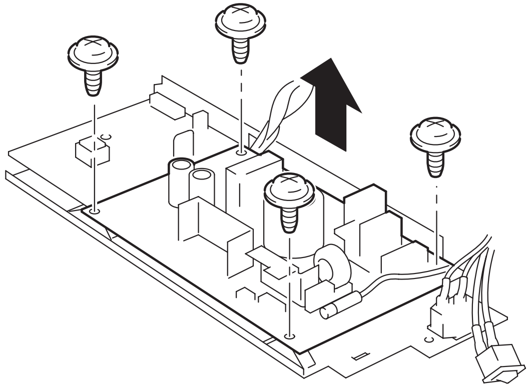


Figure 4-31. Power Supply Unit Removal

4.4.6 High Voltage Unit (HV1)

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Cover. (p.143)*
5. *Remove the Upper Rear Cover. (p.143)*
6. *Remove the Fuser Unit. (p.152)*
7. *Remove the Lower Rear Cover. (p.144)*
8. Remove the one screw, and remove the High Voltage Unit (HV1) from the Lower Rear Cover. *(See Figure 4-32)*

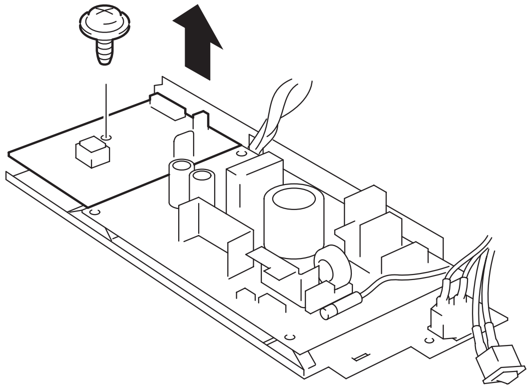


Figure 4-32. High Voltage Unit Removal

4.5 Removal and Installation of Major Components

4.5.1 Fuser Unit

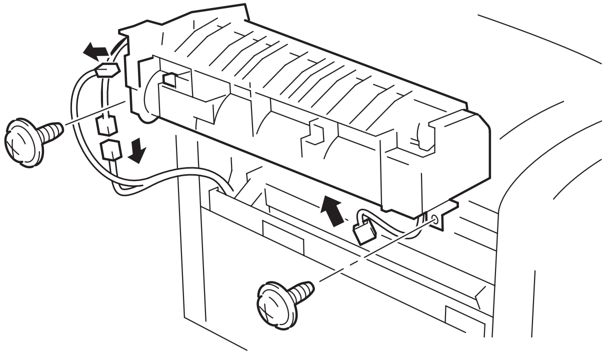
WARNING

The Fuser Unit remains at hazardous temperature for a certain period of time even after stop of operation and turning off of the power. To prevent suffering a burn, be sure to wait after power turning off until the temperature of the Fuser Unit cools down to a safe level, and then start working on the printer.

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Cover. (p.143)*
5. Disconnect the three connectors. *(See Figure 4-33)*
6. Remove the right and left screws (two screws) securing the Fuser Unit.
7. Remove the Fuser Unit by drawing it out toward the rear side.

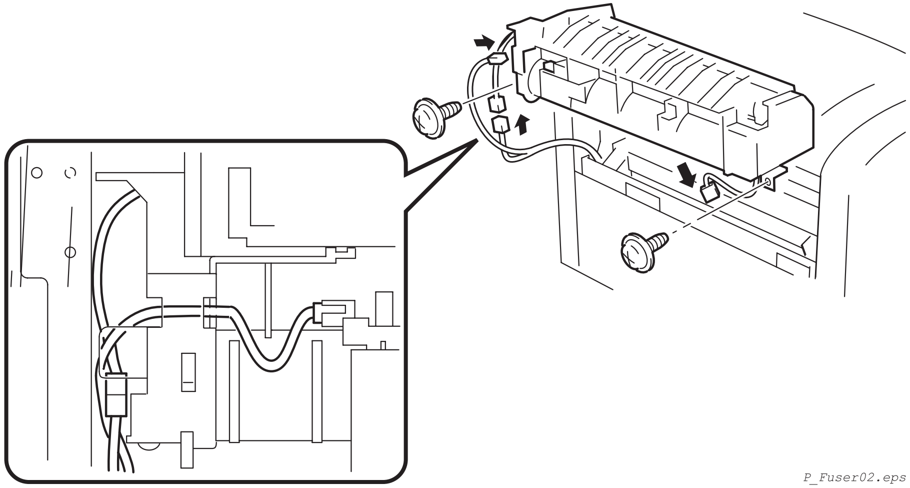
Reassembly

When installing the Fuser Unit, lead the harness as shown in Figure 4-30, and take care not to catch the harness between the Fuser Unit and the printer body.



P_Fuser.eps

Figure 4-33. Fuser Unit Removal



P_Fuser02.eps

Figure 4-34. Installing the Fuser Unit

4.5.2 Fuser Unit Disassembly

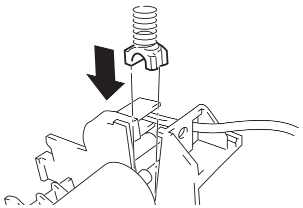
CAUTION

- **Do not touch the glass of the heater lamp with bare hands.**
- **When you remove the Fusing Separation Claw, take care not to lose the spring.**
- **To avoid scratching the Fusing Roller surface by the Fusing Separation Claw, keep the Fusing Separation Claw lifted when removing or installing the Fusing Roller.**

1. *Remove the Fuser Unit. (p.152)*
2. Remove the two screws, and separate the Fuser Unit.
3. Remove the two shaft holders, and remove the Pressure Roller.
4. Remove the one screw, and remove the terminal board.
5. Pull out the Fusing Roller Heater Lamp.
6. Pull off the driving gear from the Fusing Roller.
7. Pull out the Fusing Roller.
8. Remove the four Fusing Separation Claws.
9. Remove the one screw, and remove the Thermistor.
10. Remove the two screws, and remove the Thermostat.

Reassembly

- **When installing the Thermistor, lead the harness as shown at right.**
- **Install the Fusing Roller Heater Lamp so that the voltage indicator faces the gear side.**
- **Install the shaft holder so that the groove in the shaft holder is put on the rib of the Fuser Unit.**



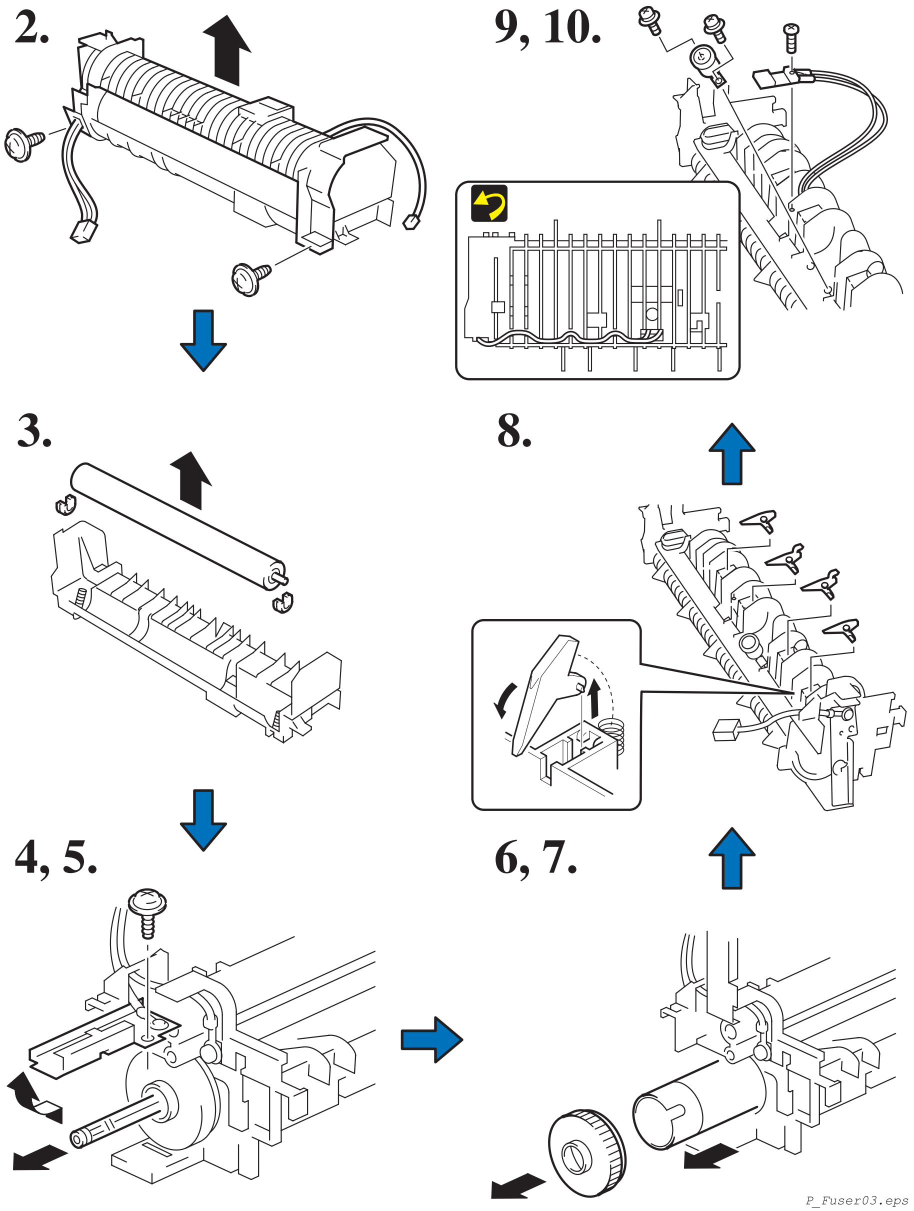


Figure 4-35. Disassembling the Fuser Unit

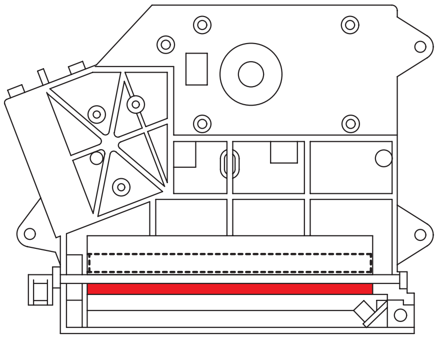
4.5.3 PH Unit

WARNING

- **Disconnect the power cable before disassembling or assembling the printer.**
- **Avoid exposing yourself to the laser beam to prevent injury (blindness).**
- **When you perform maintenance or service of the laser printer, never open any cover on which a warning label about laser beam is affixed.**
- **Understand how the laser beam functions and take maximum precautions not to injure yourself or anyone around you.**

CAUTION

- **Do not disassemble or adjust the Print Head Unit. Otherwise, a laser beam can be emitted and you may lose your eyesight if you are exposed to the laser beam.**
- **Never touch the window at the rear of the PH Unit. A soiled window can cause image trouble.**



1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the Paper Exit Cover. (p.143)*
5. Remove the protection sheet metal. *(See p.161)*
6. Disconnect the one connector (CN809) and one FFC (CN805) on the Main Board.
7. Remove the three screws, and remove the PH Unit.

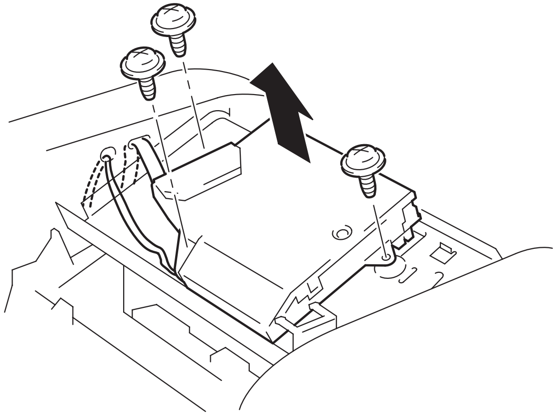


Figure 4-36. PH Unit Removal

4.5.4 Main Motor

1. *Remove the Left Cover. (p.138)*
2. Disconnect the connector of the Main Motor. *(See Figure 4-37)*
3. Remove the two screws, and remove the Main Motor from the printer.

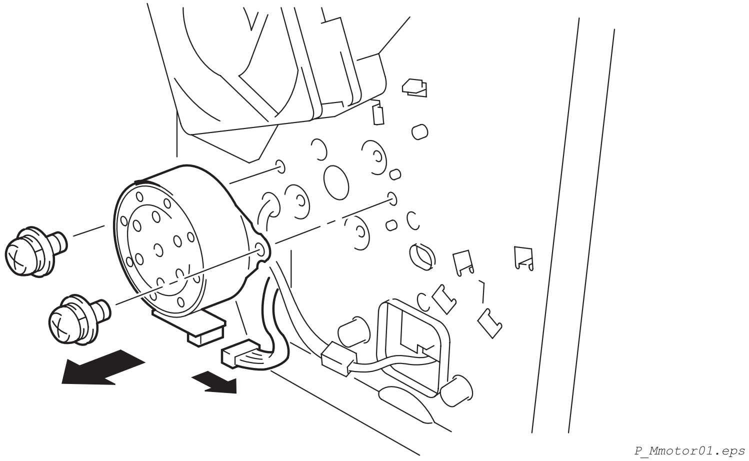


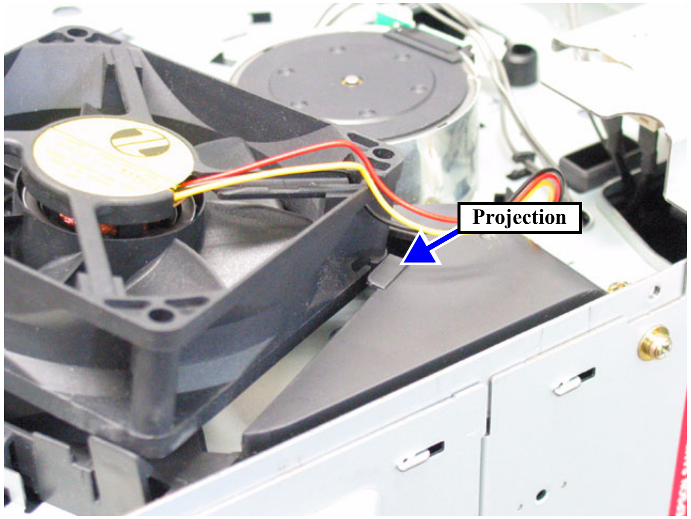
Figure 4-37. Main Motor Removal

4.5.5 Cooling Fan Motor

1. *Remove the Left Cover. (p.138)*
2. Disconnect the connector of the Cooling Fan Motor. *(See Figure 4-38)*
3. Release the four hooks, and remove the Cooling Fan Motor.

Reassembly

- **Install the Cooling Fan Motor so that the labeled side is positioned outside.**
- **Install the Cooling Fan Motor so that it is caught by the projection at the bottom left.**



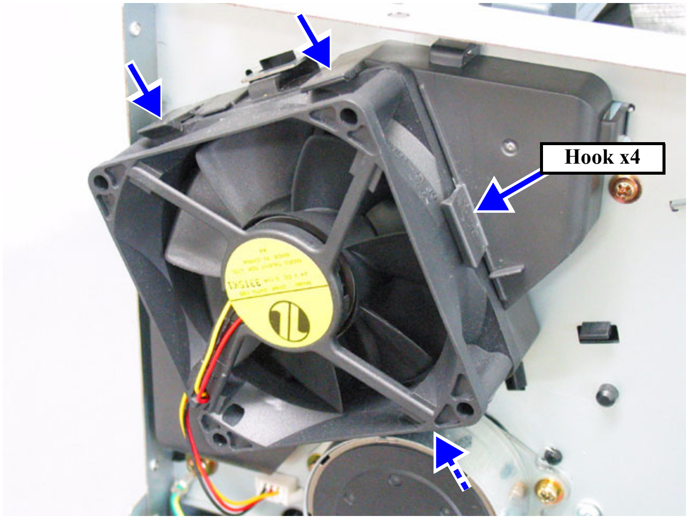


Figure 4-38. Removing the Cooling Fan Motor

4.5.6 Paper Tray Empty Sensor (EPL-6200 only)

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Front Cover. (p.141)*
4. Remove the protection sheet metal (Main Board). *(See p.161)*
5. Disconnect the one connector (CN812) on the Main Board.
   (See *Figure 4-24* or *Figure 4-25*)
6. Disconnect the connector of the I/C Sensor on the Paper Feed Upper Guide Assy.
   (See Figure 4-39)
7. Release the right and left hooks of the printer frame, and remove the Paper Feed Upper Guide Assy.
8. Release the two hooks, and remove the tray. *(See Figure 4-40)*
9. Disconnect the one connector, and remove the Paper Tray Empty Sensor.

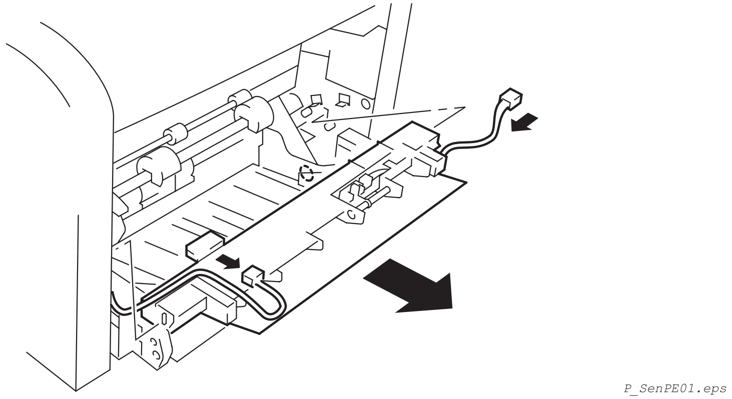


Figure 4-39. Removing the Paper Feed Upper Guide Assy

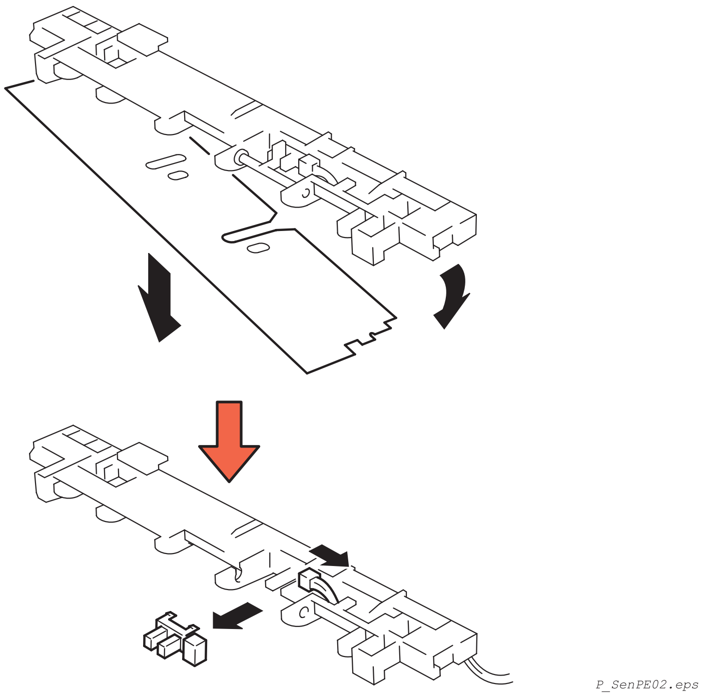


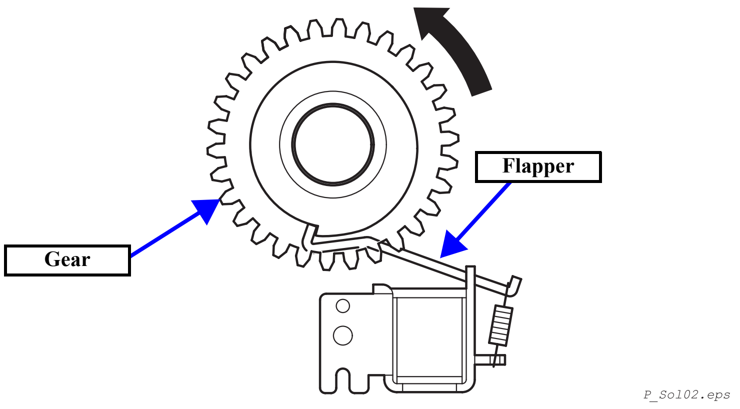
Figure 4-40. Paper Tray Empty Sensor Removal

4.5.7 Paper Feed Solenoid

1. *Remove the Left Cover. (p.138)*
2. Disconnect the connector of the Paper Feed Solenoid.
3. Remove the one screw, and remove the Paper Feed Solenoid.

Reassembly

After installing the solenoid, turn the gear in the direction of the arrow shown below until a click sound is made. Then the stopper of the gear is engaged with the flapper of the Paper Feed Solenoid.



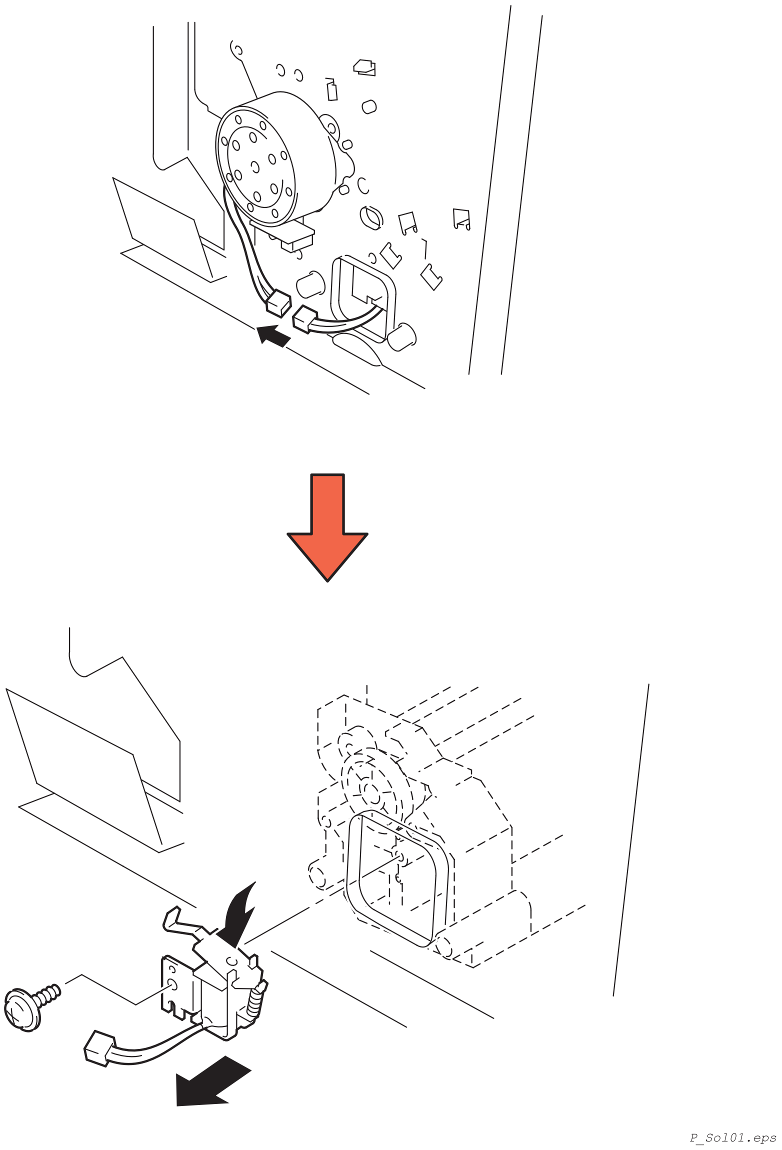
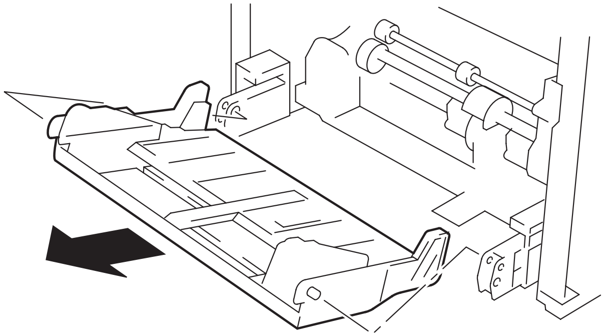


Figure 4-41. Paper Feed Solenoid Removal

4.5.8 Paper Feed Clutch Gear

1. *Remove the Left Cover. (p.138)*
2. *Remove the Right Cover. (p.139)*
3. *Remove the Top Cover. (p.142)*
4. *Remove the MP Cassette (MP Tray). (p.140)*
5. *Remove the Front Cover. (p.141)*
6. *Remove the Paper Exit Cover. (p.143)*
7. *Remove the Fuser Unit. (p.152)*
8. *Remove the Power Supply Unit (PU1). (p.151)*
9. *Remove the Main Motor. (p.155)*
10. *Remove the Cooling Fan Motor. (p.155)*
11. Remove the Paper Feed Upper Guide Assy. *(See p.156)*
12. Remove the Push-up Plate Assy and the two springs.

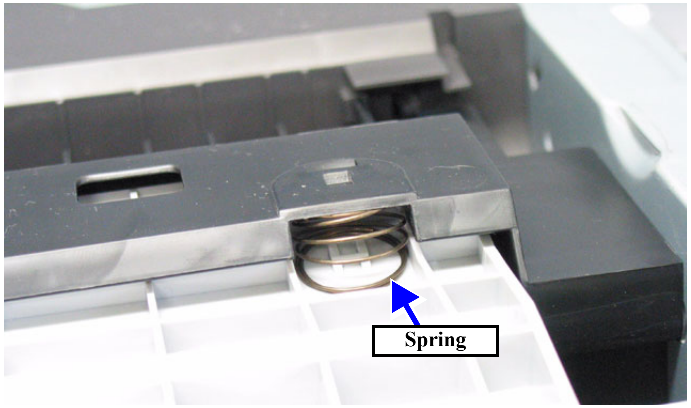


P_clutchG01.eps

Figure 4-42. Removing the Push-up Plate Assy

Reassembly

For easy installation of the spring of the Push-up Plate Assy, you are advised to install the Push-up Plate Assy first and then install the spring from the direction of the printer bottom.



13. Remove the protection sheet metal. *(See p.161)*
14. Disconnect the one connector (CN809) and one FFC (CN805) on the Main Board.
15. Remove the two screws from each of the right and left frames of the printer, and remove the PH Base Plate Assy. *(See Figure 4-43)*
16. Disconnect the connector of the Paper Feed Solenoid, remove the two screws, and remove the left frame. *(See Figure 4-44)*
17. Remove the one screw, and remove the Paper Feed Solenoid. *(See Figure 4-45)*
18. Release the two hooks, and remove the Paper Feed Clutch Gear.

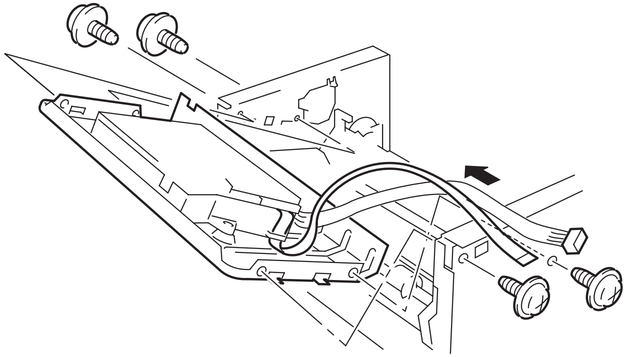


Figure 4-43. Removing the PH Base Plate Assy

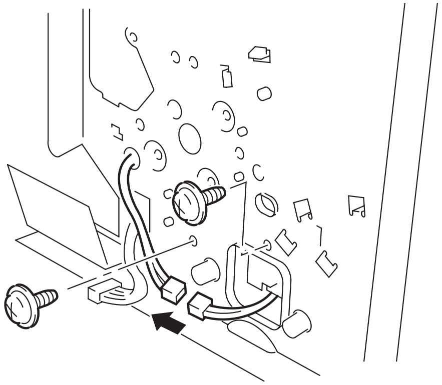


Figure 4-44. Removing the Left Frame

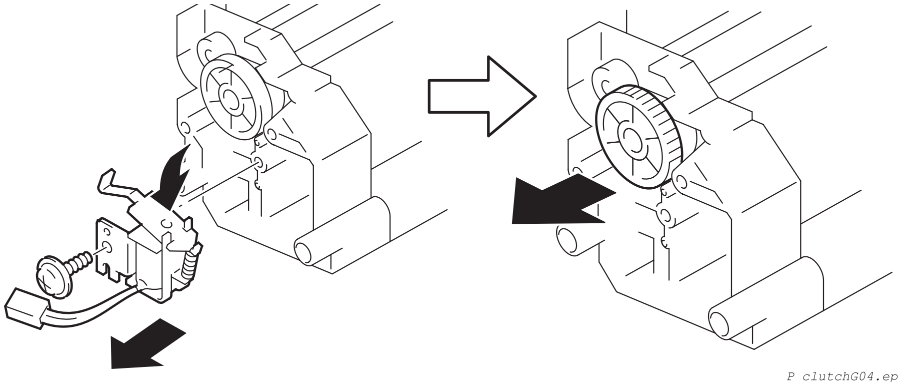


Figure 4-45. Removing the Paper Feed Clutch Gear

4.6 Lower Cassette Unit (Option)

4.6.1 Second Paper Feed Unit

1. Remove the Duplex Unit. (If the Duplex Unit has been installed)
2. Separate the printer body and the second paper cassette from each other.
3. Release the two hooks, and remove the cover.
4. Remove the actuator.
5. Remove the six screws, disconnect the one connector, and remove the Second Paper Feed Unit.

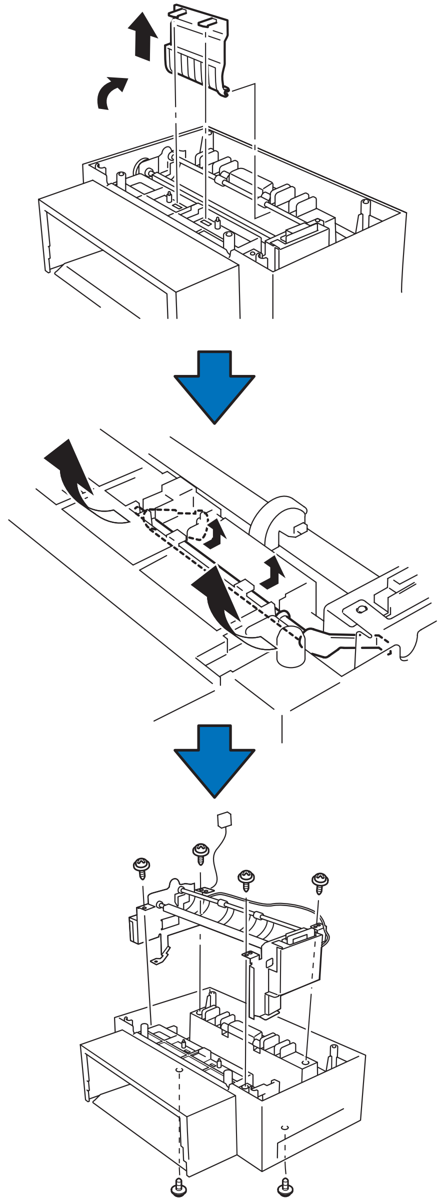


Figure 4-46. Removing the Second Paper Feed Unit

4.6.2 Paper Feed Roller (Lower Cassette)

1. Remove the Duplex Unit. (If the Duplex Unit has been installed)
2. Separate the printer body and the second paper cassette from each other.
3. Remove the two Paper Feed Rollers.

4.6.3 Paper Feed Solenoid (Lower Cassette)

1. Remove the Duplex Unit. (If the Duplex Unit has been installed)
2. Separate the printer body and the second paper cassette from each other.
3. *Remove the Second Paper Feed Unit. (p.160)*
4. Remove the one screw, and remove the cover. *(See Figure 4-48)*
5. Remove the one screw, disconnect the one connector, and remove the Second Tray Paper Feed Solenoid.

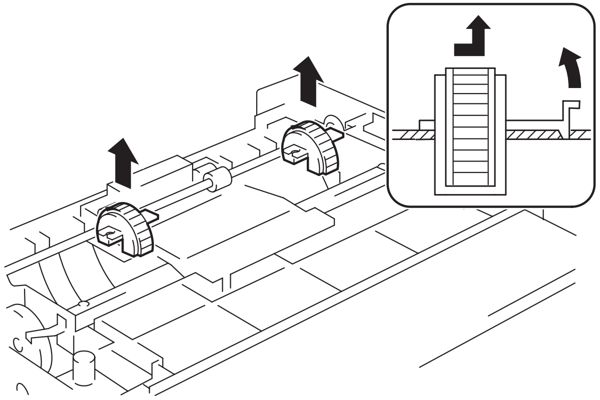


Figure 4-47. Paper Feed Roller Removal

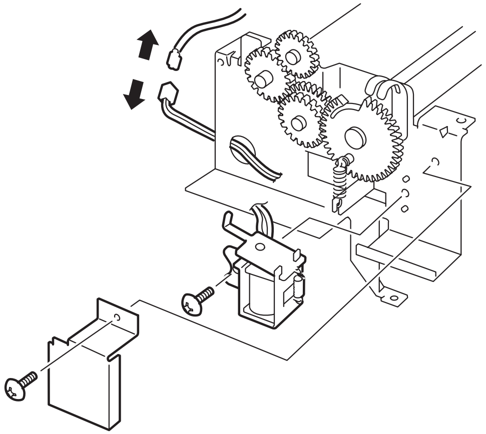


Figure 4-48. Removing the Second Tray Paper Feed Solenoid.

4.6.4 Paper Cassette Unit Control Board

1. Remove the Duplex Unit. (If the Duplex Unit has been installed)
2. Separate the printer body and the second paper cassette from each other.
3. *Remove the Second Paper Feed Unit. (p.160)*
4. Remove the one screw, disconnect the one connector, and remove the cover. *(See Figure 4-49)*
5. Remove the two screws, and remove the Second Tray Control Board.

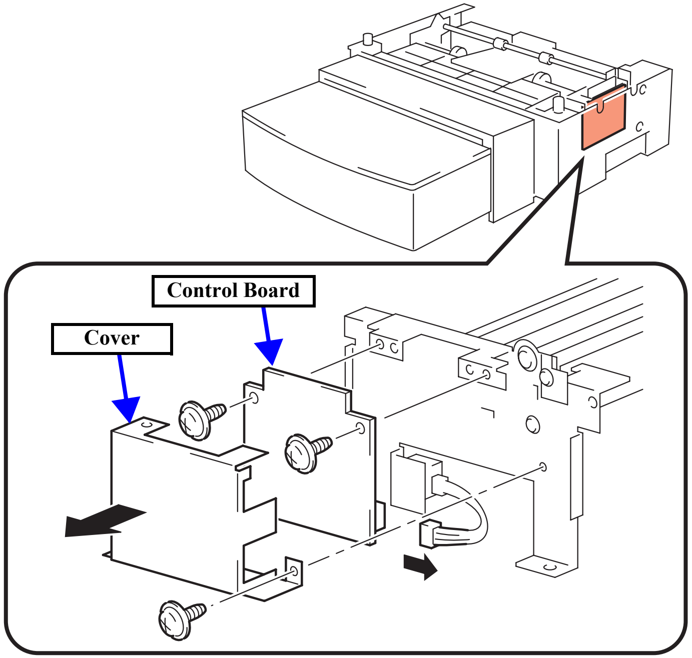


Figure 4-49. Removing the Control Board

4.6.5 Paper Size Detect Switch

1. Remove the Duplex Unit. (If the Duplex Unit has been installed)
2. Separate the printer body and the second paper cassette from each other.
3. *Remove the Second Paper Feed Unit. (p.160)*
4. Disconnect the one connector, and remove the Paper Size Detect Switch. *(See Figure 4-50)*

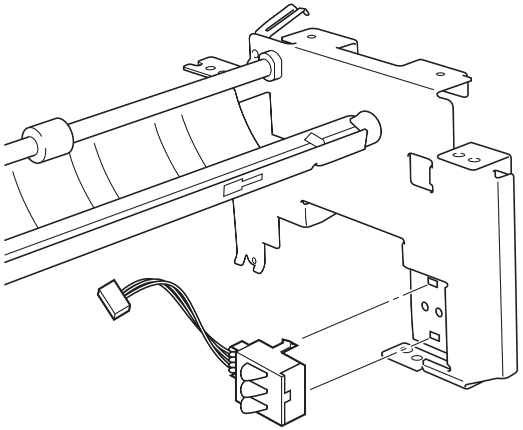


Figure 4-50. Removing the Paper Size Detect Switch

4.7 Duplex Unit (Option)

4.7.1 Right Cover

1. Remove the Duplex Unit.
2. Release the one hook.
3. Remove the Right Cover.

4.7.2 Left Cover

1. Remove the Duplex Unit.
2. Release the one hook.
3. Remove the Left Cover.

4.7.3 Duplex Unit Control Board

1. Remove the Duplex Unit.
2. Remove the Right Cover.
3. Disconnect all the connectors on the Duplex Unit Control Board. *(See Figure 4-52)*
4. Remove the two screws, and remove the Duplex Unit Control Board.

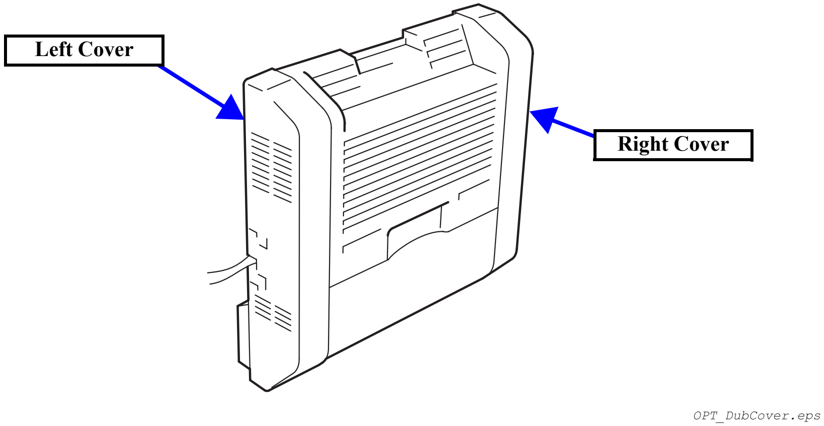


Figure 4-51. Duplex Unit

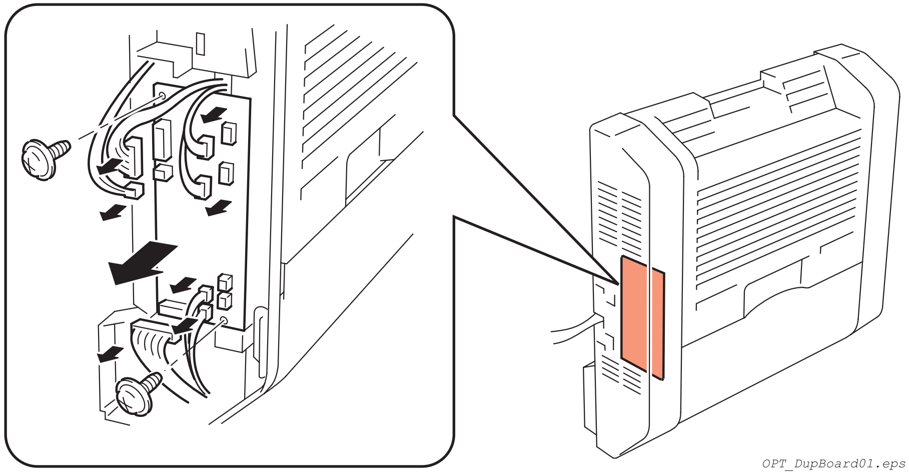


Figure 4-52. Removing the Duplex Unit Control Board

4.7.4 Duplex Unit Inversion Motor

1. Remove the Duplex Unit.
2. Remove the Left Cover.
3. Disconnect the one connector. *(See Figure 4-53)*
4. Remove the two screws, and remove the Duplex Unit Inversion Motor.

4.7.5 Duplex Unit Transport Motor

1. Remove the Duplex Unit.
2. Remove the Left Cover.
3. Disconnect the one connector. *(See Figure 4-54)*
4. Remove the two screws, and remove the Duplex Unit Transport Motor Assy.
5. Remove the Duplex Unit Transport Motor.

4.7.6 Duplex Unit Skew Correction Solenoid

1. Remove the Duplex Unit.
2. Remove the Left Cover.
3. Disconnect the one connector. *(See Figure 4-55)*
4. Remove the one screw, and remove the Duplex Unit Skew Correction Solenoid.

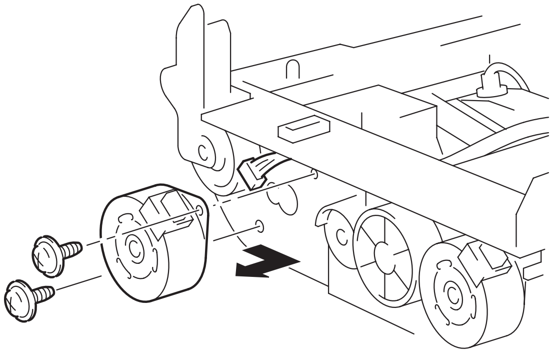


Figure 4-53. Removing the Duplex Unit Inversion Motor

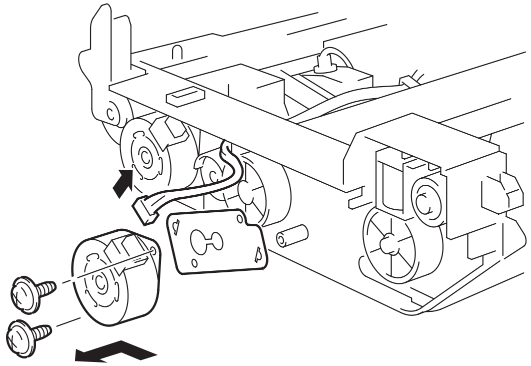


Figure 4-54. Removing the Duplex Unit Transport Motor

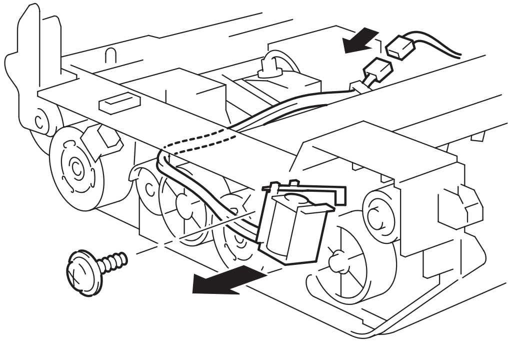


Figure 4-55. Removing the Duplex Unit Skew Correction Solenoid

CHAPTER

5

ADJUSTMENT

5.1 Overview

This printer requires the following adjustments, when repairing the printer by replacing the main board.

- USB-ID input *(See page 167)*
- Feed Registration Adjustment *(See page 169)*

The detailed procedures for each adjustment is explained in the following pages.

5.2 USB ID Input

EPL-6200/EPL-6200L comes with the USB interface as standard, and the PC connected to the EPL-6200/EPL-6200L via the USB interface identifies the printer by referring to the USB ID information specific to each printer.

Since this USB ID information is stored on EEPROM on the MAIN Board of the printer, you have to re-define the ID information by the procedure described below when you have replaced the MAIN Board for repair.

CAUTION

When you repair the printer and re-define the USB ID information, you have to tell the user to uninstall the previously installed printer driver as it is referring to the old USB ID information.

The program for USB ID input and the supported operating environment are as follows:

☐ Program
PagePrinter_Ver10E.exe

☐ Operating environment
- OS: Win95 OSR2.0 or later / Win98/WinMe/2000/XP
- Port used: LPT1 ~ LPT3 (Windows95/98)

☐ Model specific number
- EPL-6200: 24
- EPL-6200L: 23

5.2.1 Installation Procedure for Program

Copy the adjustment program file onto the desktop or into a folder.

CHECK POINT

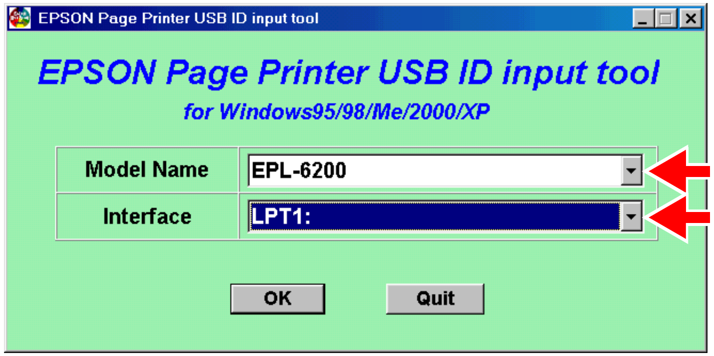
The program does not run only with "PagePrinter_Ver11J.exe". Therefore, be sure to copy also the files in the same holder.

5.2.2 Procedure for Program Operation

CAUTION

- **Do not start the adjustment program before connecting the parallel cable to the printer.**
- **This program can not be executed together with EPSON Status Monitor on Windows 95/98. Be sure to terminate the EPSON Status Monitor before starting the adjustment program.**
- **If the power to the printer is turned off or the parallel cable is disconnected during running of the adjustment program, be sure to restart the program.**
- **On the "Details of Display" tab of "Property of Screen", do not change "font size."**
- **Once you have set or input a USB ID, never forget to verify it.**

1. When you execute the program, the menu window shown below will appear.
2. Select the model name and interface, and click the OK button.

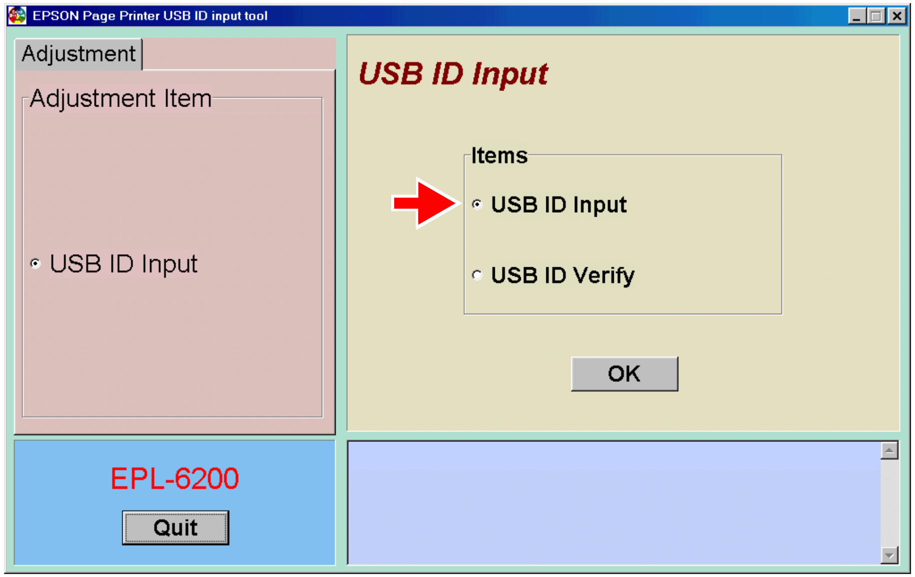

EPSON Page Printer USB ID input tool

EPSON Page Printer USB ID input tool
for Windows95/98/Me/2000/XP

Model Name: EPL-6200
Interface: LPT1:

Figure 5-1. Model Select Screen (Start Initial Screen)

3. When the window as shown in Figure 5-2 is displayed, check “USB ID input” and click the OK button.


EPSON Page Printer USB ID input tool
Adjustment
Adjustment Item
USB ID Input
USB ID Input
Items
USB ID Input
USB ID Verify
OK
EPL-6200
Quit

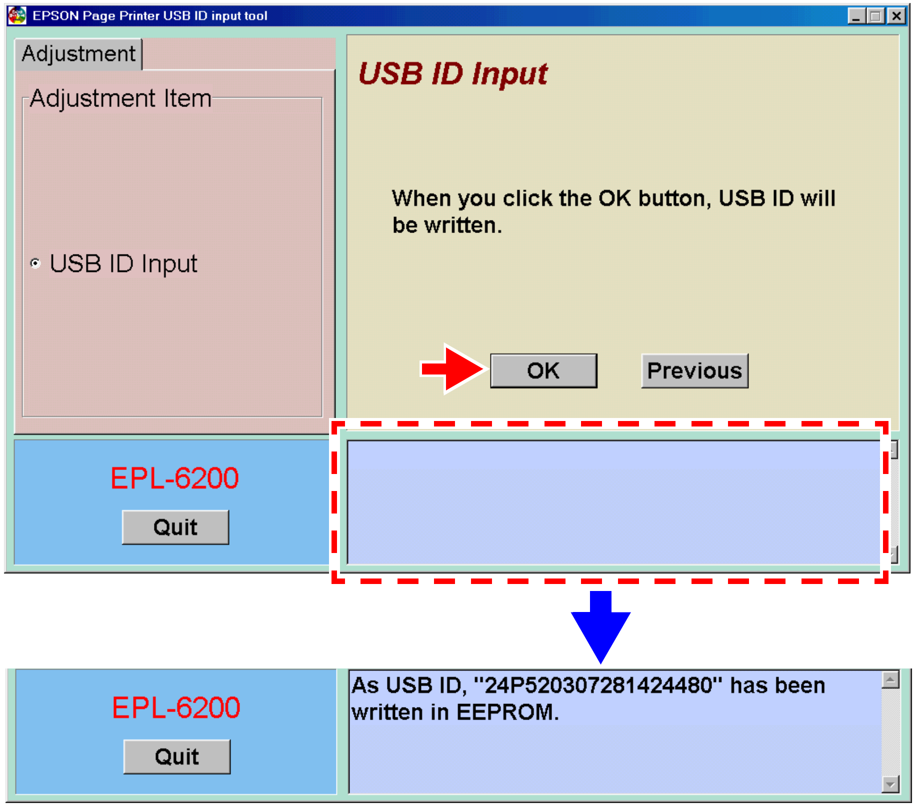
Items: ● USB ID Input ○ USB ID Verify

Figure 5-2. USB ID Select Screen

CHECK POINT ✓

When you have selected EPL-6200L, this screen is not displayed, and the input screen as shown at right is displayed directly.

4. Click the OK button on the screen as shown below, and the USB ID (18 digits in total) will be written.


EPSON Page Printer USB ID input tool
Adjustment
Adjustment Item
USB ID Input
USB ID Input
OK
Previous
EPL-6200
Quit
EPL-6200
Quit

When you click the OK button, USB ID will be written.

As USB ID, "24P520307281424480" has been written in EEPROM.

Figure 5-3. USB ID Input Window

CHECK POINT ✓

A successive press of the OK button will write a different number.

CAUTION !

Once you have input a new USB ID, never forget to confirm it on the status sheet.

5.3 Feed Registration Adjustment

With the EPL-6200/6200L, the image registration position in sub-scanning direction (paper feeding direction) is adjusted on each engine mechanism and the registration position correction value is stored on the non-volatile memory on the main controller at the factory.

The registration position should be verified and re-adjusted, when any repair with the main contoller replacement is made. Follow the instructions below to make the feed registration position adjustment.

5.3.1 Preparation

To make the feed reregistration adjustment, an exclusive adjustment program is required.

☐ Program Name
AdjustFeedRegi.exe

☐ Applicable Models
EPL-6200, EPL-6200L

☐ System Requirements
- Supported OS: Windows 98/Me/2000/XP
- Supported Port: Parallel, USB (for Windows Me/2000/XP)

☐ Installation
Put all files in the supplied compressed archive file, into a single folder. (To uninstall, simply delete whole folder.)

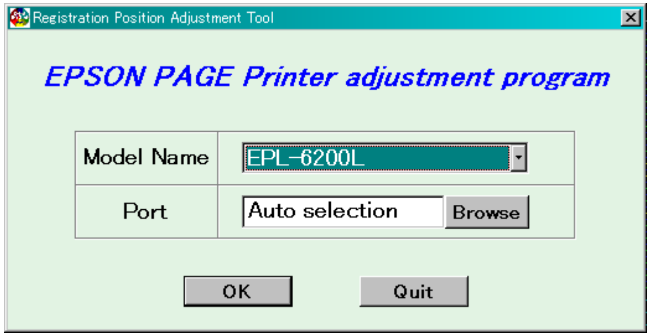
5.3.2 Adjustment

Follow the steps below to execute the adjustment program and proceed the adjustment.

CAUTION

- **Do not start the adjustment program before connecting the parallel cable to the printer.**
- **This program can not be executed together with EPSON Status Monitor on Windows 95/98. Be sure to terminate the EPSON Status Monitor before starting the adjustment program.**
- **If the power to the printer is turned off or the parallel cable is disconnected during running of the adjustment program, be sure to restart the program.**
- **On the "Details of Display" tab of "Property of Screen", do not change "font size."**

1. Connect the target printer to the PC, and turn it on.
2. Double-click on the adjustment progarm icon, and the following main program menu window is displayed.



Registration Position Adjustment Tool

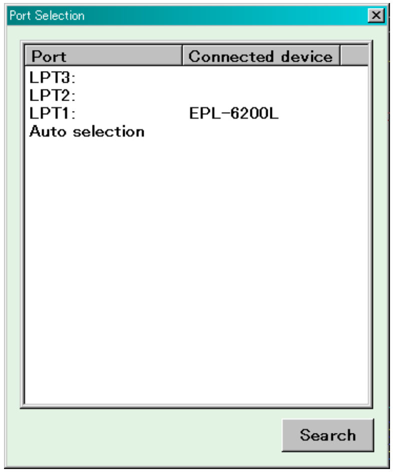
EPSON PAGE Printer adjustment program

Model Name: EPL-6200L

Port: Auto selection

3. Specify the model to be adjusted in the [Model Name] list box.

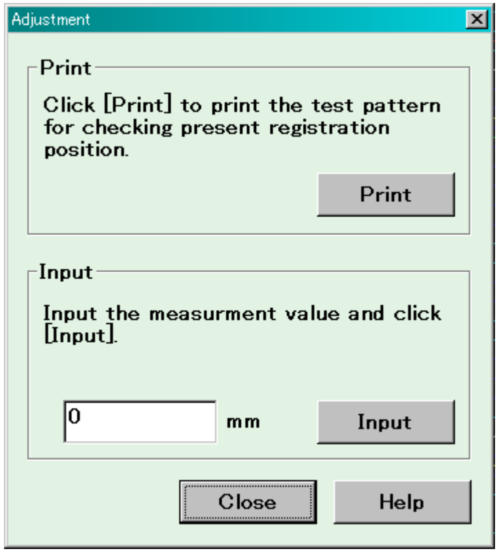
4. Specify the port of the PC in the [Port] list box, to which the target printer is connected. As a default, “Auto Selection” is specified and the program automatically search for the port with the target printer connected. You can manually select the port by clicking [Browse] button to view all available ports.


Port Selection

Port	Connected device
LPT3:	
LPT2:	
LPT1:	EPL-6200L
Auto selection	

Search

5. Click on [OK] button and the window shouwn below is appear on the screen.


Adjustment

Print

Click [Print] to print the test pattern for checking present registration position.

Print

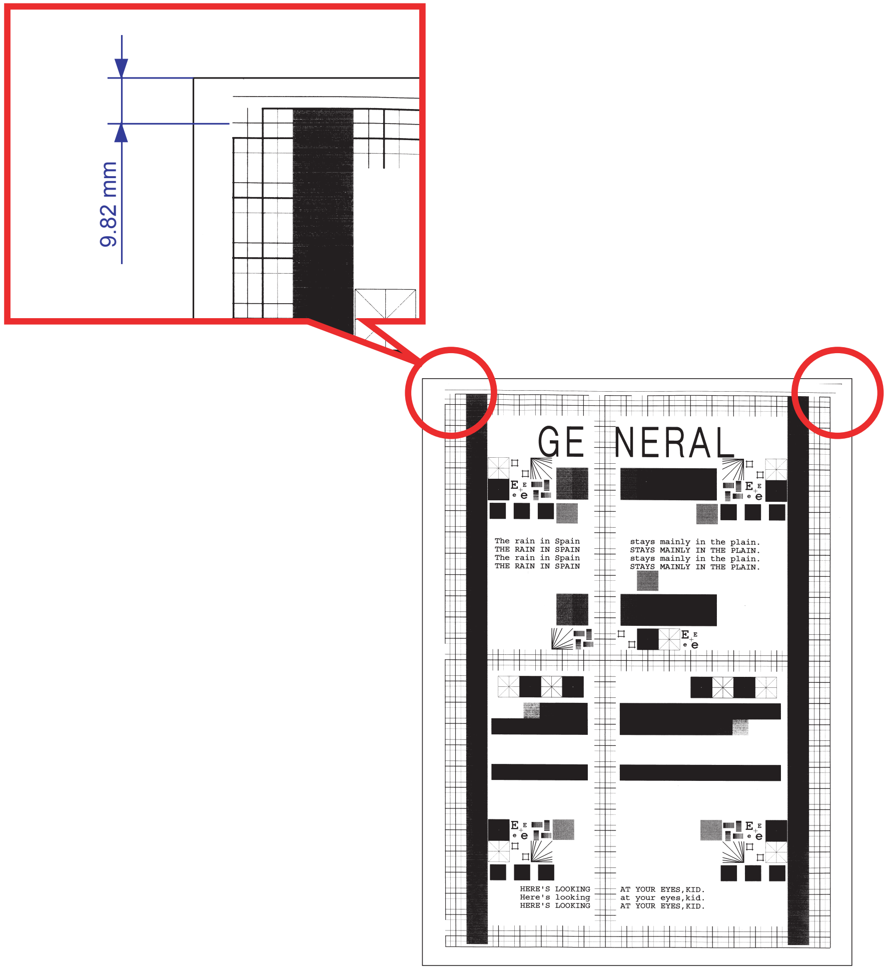
Input

Input the measurment value and click [Input].

0 mm

Input
Close
Help

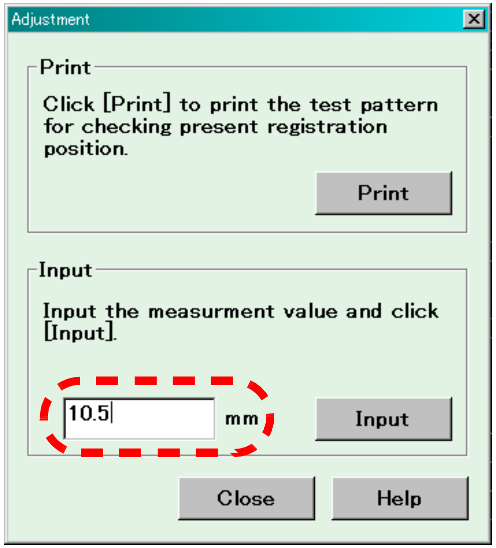
6. Click on [Print] button to print a test pattern chart. Take a printed chart and measure the distance from the leading edge of paper to a specified check point on the pattern (see figure below).
The feed registration position: 9.82 ± 0.23 mm (10.05 - 9.59mm)


9.82 mm
GE NERAL
The rain in Spain
THE RAIN IN SPAIN
stays mainly in the plain.
STAYS MAINLY IN THE PLAIN.
HERE'S LOOKING
Here's looking
AT YOUR EYES,KID.
at your eyes,kid.

CAUTION

- **Verify the registration position at both left and right side of the pattern.**
- **When printing a test pattern chart, make sure that the edge guide of paper tray is properly aligned against the edge of paper in order to avoid possible skew with fed paper.**

7. If the position is shifted, input the measured distance value in [Input] box and click [Input] button to store the value on the main controller.



Click [Print] to print the test pattern for checking present registration position.

Input the measurment value and click [Input].

10.5 mm

CAUTION

If the input value is within the tolerance of adjust value, the program displays a message and the value on the main controller remains unchanged.

8. Click on [Print] button to print the pattern again with the specified correction value. If further adjustment is required, go to <step 6> to repeat adjustment.
9. When the adjustment is finished, click on [Quit] button to terminate the program.
10. Turn off the printer.

CHAPTER

6

MAINTENANCE

6.1 Overview

This section gives information necessary for maintaining the printer in its optimum condition.

In maintenance and checks, never fail to observe the following precautions.

WARNING

- **Disconnect the power cable before starting maintenance and checks of the printer.**
- **Always wear gloves for maintenance and checks to avoid injury from sharp metal edges.**
- **Do not expose yourself to the laser beam to prevent injury (blindness).**
- **When you perform maintenance or service of the laser printer, never open any cover on which a warning label about laser beam has been affixed.**
- **Understand how the laser beam functions and take maximum precautions not to injure yourself or anyone around you. When working on the FUSER ASSY or nearby parts, be sure to wait until the temperature of the parts cool down to a safe level.**
  After stopping operation of the printer, wait at least 40 minutes and then start working on the printer.
- **To avoid dust explosion or ignition, never bring any consumables close to flame or throw them into fire.**

CAUTION

- **Do not use alcohol, paint thinner, or other such solvents.**
- **Do not clean the surface of the roller in the Transfer Roller Unit. If the roller is particularly dirty, try printing some sheets to remove the dirt, or take out the Transfer Roller Unit and blow the dirt off using a compressed air gun.**

6.1.1 Cleaning

Check the inside of the printer, and remove foreign matters, if any, such as paper clips, staples, bits of paper, paper dust or toner.

Table 6-1. Cleaning Items

Item	Time for Cleaning	Cleaning Method
Paper Feed Roller	When image quality has lowered or paper feed error occurs	Wipe the rubber surface with a soft cloth soaked in water once and then squeezed strongly.

6.1.2 Maintenance

Regular Replacement Parts and Consumables are as listed below:

The maintenance work of this printer does not require any special tool or grease.

Table 6-2. Regular Replacement Parts and Consumables

Parts Requiring Periodical Replacement	Time for Replacement
Developer Cartridge (Toner Cartridge)	An average of 6,000 pages or 3,000 pages Pre-installed cartridge: 3,000 pages (EPL-6200) 1,500 pages (EPL-6200L)
Drum Cartridge (Photoconductor Unit)	After printing of about 20,000 sheets
Fuser Unit	After printing of about 50,000 sheets (5% pattern continuous printing)
Transfer Roller	After printing of about 50,000 sheets

6.1.3 Cleaning of Paper Feed Rollers

PAPER FEED ROLLER OF MAIN UNIT

1. Remove the Imaging Cartridge.
2. Clean the Paper Feed Roller with a cloth.

PAPER FEED ROLLER OF SECOND PAPER CASSETTE (OPTION)

1. Remove the Duplex Unit, and separate the printer body and the second paper cassette from each other.
2. Clean the Paper Feed Roller with a cloth.

CHECK POINT

Remove and clean the Paper Feed Roller if soiled heavily. For how to remove the Paper Feed Roller, refer to the following:

- **4.2.2 Paper Feed Roller *(p.134)***
- **4.6.2 Paper Feed Roller (Lower Cassette) *(p.161)***

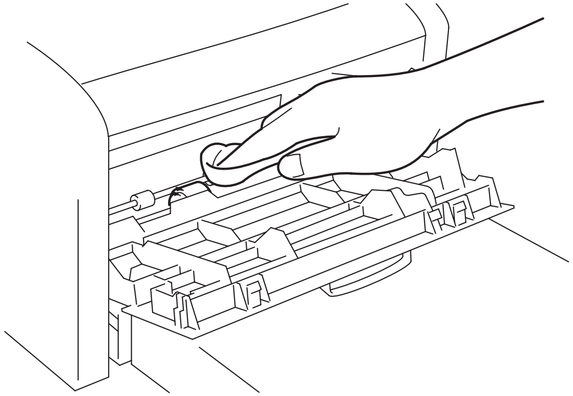


Figure 6-1. Cleaning the Paper Feed Roller (Main Unit)

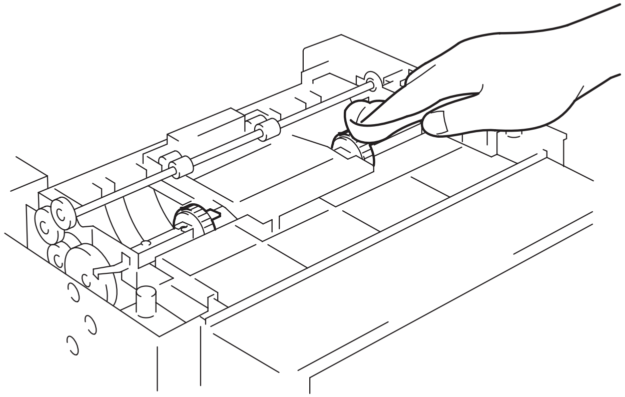


Figure 6-2. Cleaning the Paper Feed Roller (Lower Cassette)

CHAPTER

7

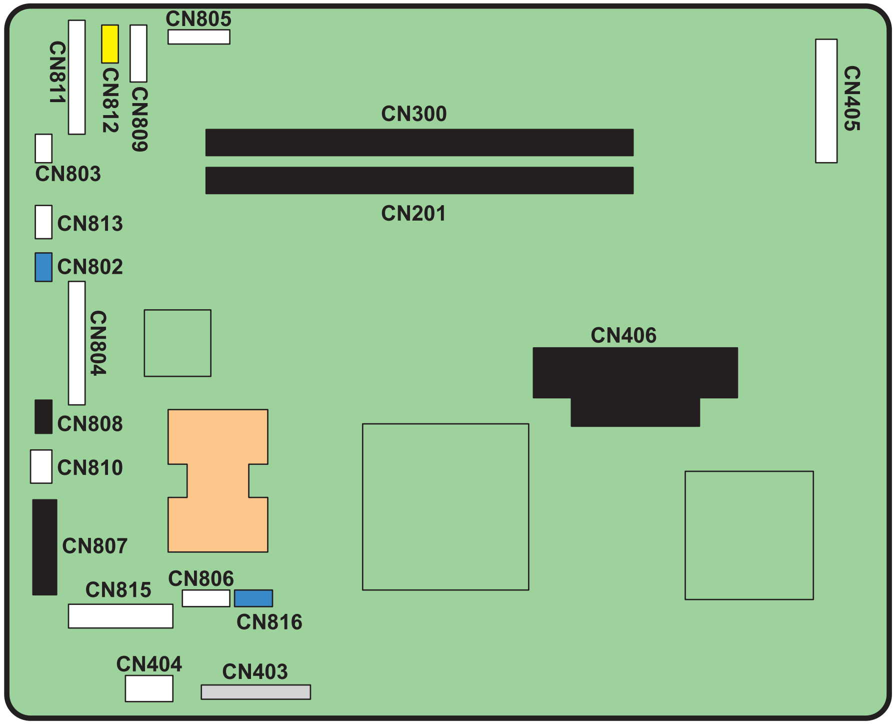
APPENDIX

7.1 Connectors

7.1.1 Connectors on Main Board Assy (EPL-6200)

Table 7-1. Connectors on Main Board Assy (EPL-6200)

CN No.	Pins	Color	Connected to	Remarks
403	21	–	Parallel I/F Board	FFC
404	4	White	USB I/F Board	
405	12	White	Control Panel	
802	2	Blue	Fuser Unit	
803	2	White	Paper Feed Solenoid	
804	12	White	High Voltage Unit (CN1)	
805	10	–	PH Unit	FFC
806	4	White	Main Motor	
807	7	Black	Power Supply Unit (CN2)	
808	3	Black	Fuser Unit	
809	5	White	PH Unit	
810	2	White	Paper Jam Sensor	
811	11	White	Lower Cassette Unit	
812	3	Yellow	MP Tray Empty Sensor	
813	3	White	Cooling Fan	
815	10	White	Duplex Unit Connector	
816	3	Blue	Cartridge Sensor	


CN805
CN811
CN812
CN809
CN300
CN405
CN803
CN201
CN813
CN802
CN804
CN406
CN808
CN810
CN807
CN815
CN806
CN816
CN404
CN403

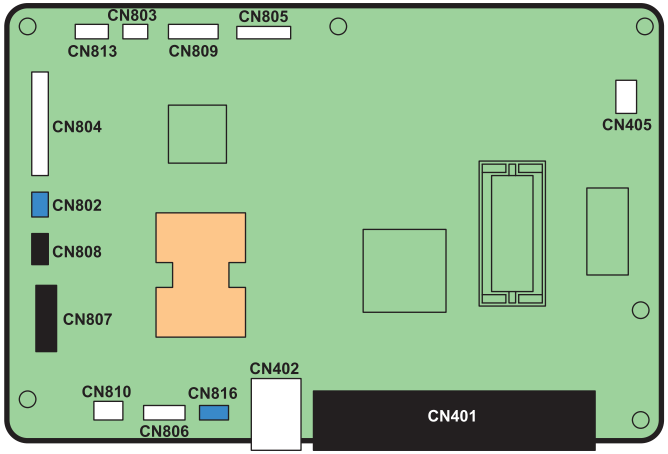
C533Main01.eps

Figure 7-1. Connector Locations on C533 Main

7.1.2 Connectors on Main Board Assy (EPL-6200L)

Table 7-2. Connectors

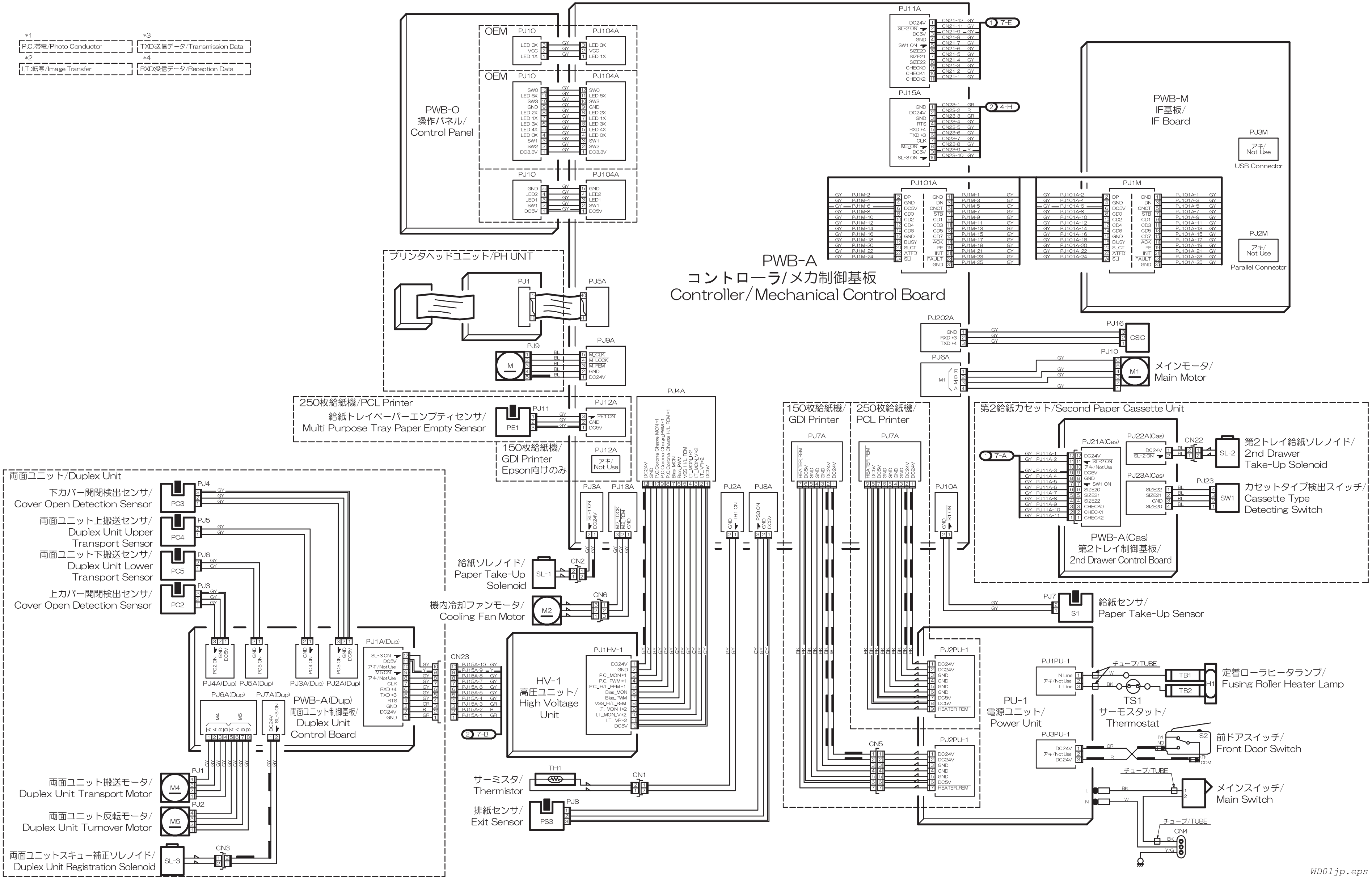
CN No.	Pins	color	Connected to	Remarks
405	3	White	Panel (LED)	
802	2	Blue	Fuser Unit	
803	2	White	Paper Feed Solenoid	
804	12	White	High Voltage Unit (CN1)	
805	10	-	PH Unit	FFC
806	4	White	Main Motor	
807	7	Black	Power Supply Unit (CN2)	
808	3	Black	Fuser Unit	
809	5	White	PH Unit	
810	2	White	Paper Jam Sensor	
813	3	White	Cooling Fan	
816	3	Blue	Cartridge Sensor	


CN803
CN805
CN813
CN809
CN804
CN405
CN802
CN808
CN807
CN402
CN810
CN816
CN806
CN401

C534Main02.eps

Figure 7-2. Connector Locations on C534 Main

7.1.3 Connector Assignment Diagram (Overall)

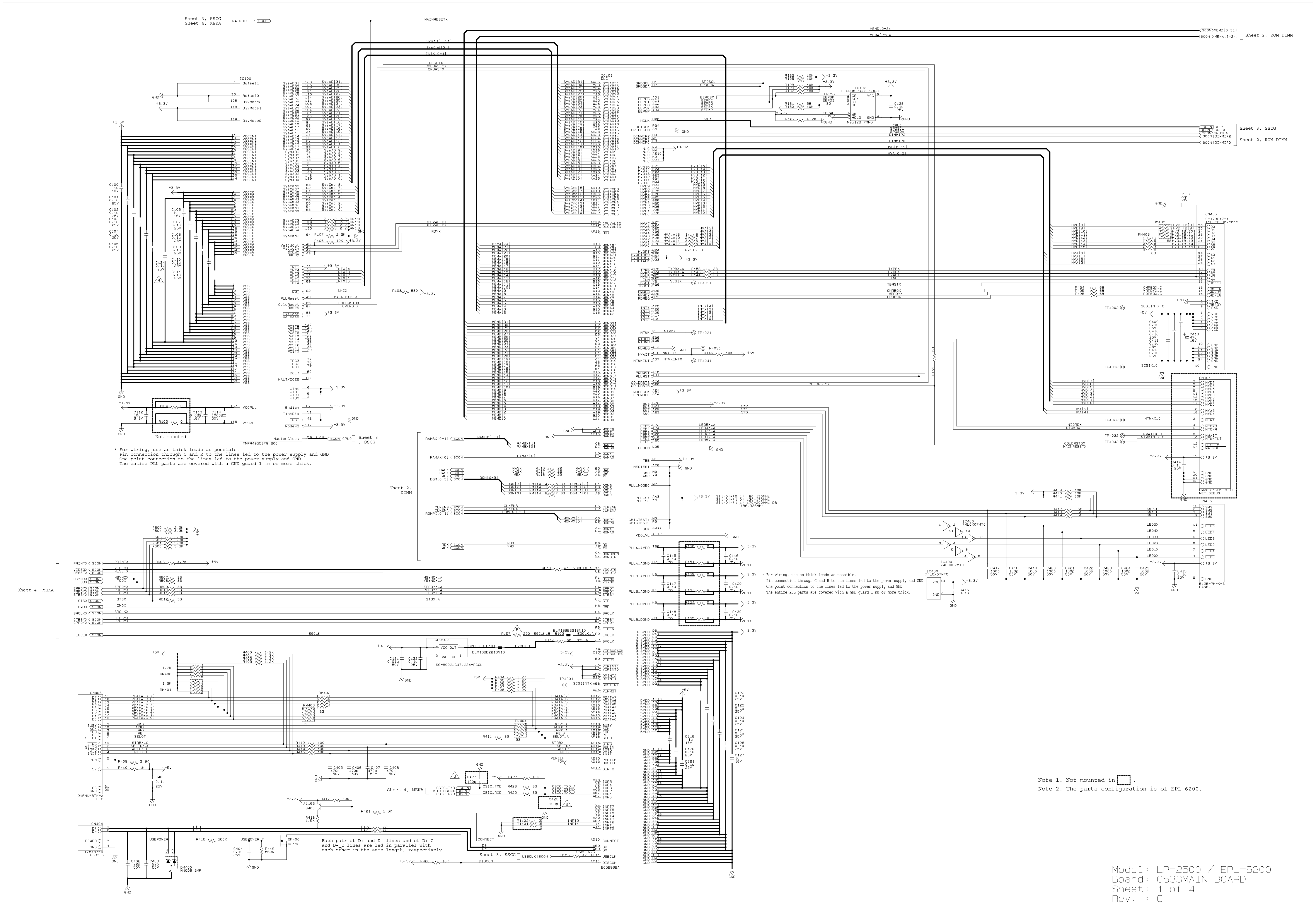

*1
P.C.:帯電/Photo Conductor
*2
I.T.:転写/Image Transfer
*3
TXD:送信データ/Transmission Data
*4
RXD:受信データ/Reception Data
PWB-O
操作パネル/
Control Panel
OEM
PJ1O
PJ104A
プリンタヘッドユニット/PH UNIT
PJ1
PJ5A
PJ9
PJ9A
250枚給紙機/PCL Printer
給紙トレイペーパーエンプティセンサ/
Multi Purpose Tray Paper Empty Sensor
PE1
PJ11
PJ12A
150枚給紙機/
GDI Printer
Epson向けのみ
アキ/
Not Use
PJ11A
PJ15A
PJ101A
PJ1M
PWB-A
コントローラ/メカ制御基板
Controller/Mechanical Control Board
PWB-M
IF基板/
IF Board
PJ3M
アキ/
Not Use
USB Connector
PJ2M
アキ/
Not Use
Parallel Connector
PJ202A
PJ16
CSIC
PJ6A
PJ10
M1
メインモータ/
Main Motor
PJ4A
150枚給紙機/
GDI Printer
250枚給紙機/
PCL Printer
PJ7A
PJ10A
第2給紙カセット/Second Paper Cassette Unit
PJ21A(Cas)
PJ22A(Cas)
CN22
SL-2
第2トレイ給紙ソレノイド/
2nd Drawer
Take-Up Solenoid
PJ23A(Cas)
PJ23
SW1
カセットタイプ検出スイッチ/
Cassette Type
Detecting Switch
PWB-A(Cas)
第2トレイ制御基板/
2nd Drawer Control Board
両面ユニット/Duplex Unit
下カバー開閉検出センサ/
Cover Open Detection Sensor
PC3
PJ4
両面ユニット上搬送センサ/
Duplex Unit Upper
Transport Sensor
PC4
PJ5
両面ユニット下搬送センサ/
Duplex Unit Lower
Transport Sensor
PC5
PJ6
上カバー開閉検出センサ/
Cover Open Detection Sensor
PC2
PJ3
PJ3A
PJ13A
給紙ソレノイド/
Paper Take-Up
Solenoid
SL-1
CN2
機内冷却ファンモータ/
Cooling Fan Motor
M2
CN6
PJ2A
PJ8A
PJ7
S1
給紙センサ/
Paper Take-Up Sensor
PJ4A(Dup)
PJ5A(Dup)
PJ3A(Dup)
PJ2A(Dup)
PJ6A(Dup)
PJ7A(Dup)
PJ1A(Dup)
PWB-A(Dup)
両面ユニット制御基板/
Duplex Unit
Control Board
CN23
HV-1
高圧ユニット/
High Voltage
Unit
PJ1HV-1
PJ2PU-1
PU-1
電源ユニット/
Power Unit
PJ1PU-1
チューブ/TUBE
TB1
TB2
H1
定着ローラヒータランプ/
Fusing Roller Heater Lamp
TS1
サーモスタット/
Thermostat
PJ3PU-1
S2
前ドアスイッチ/
Front Door Switch
CN5
チューブ/TUBE
メインスイッチ/
Main Switch
チューブ/TUBE
CN4
両面ユニット搬送モータ/
Duplex Unit Transport Motor
M4
PJ1
両面ユニット反転モータ/
Duplex Unit Turnover Motor
M5
PJ2
両面ユニットスキュー補正ソレノイド/
Duplex Unit Registration Solenoid
SL-3
CN3
サーミスタ/
Thermistor
TH1
CN1
排紙センサ/
Exit Sensor
PS3
PJ8
1 7-E
2 4-H
1 7-A
2 7-B
WD01jp.eps

7.2 Circuit Diagrams

This section shows electric control circuit diagrams of EPL-6200/EPL-6200L.

Table 7-3. Circuit Diagrams List

Model	Circuit Board Name	Names of Parts	Refer to
EPL-6200	C533 MAIN	Main Board Assy	*p.180*
EPL-6200L	C534 MAIN	Main Board Assy	*p.184*


Sheet 3, SSCG
Sheet 4, MEKA
MAINRESETX
SCON
IC100
TMPR4955BFG-200
MasterClock
CPU0
Sheet 3, SSCG
Not mounted
IC101
DLC
E05B96BA
IC102
EEPROM 128K SOP8
M95128-WMN6T
Sheet 2, ROM DIMM
Sheet 3, SSCG
Sheet 2, ROM DIMM
Sheet 2, DIMM
Sheet 4, MEKA
CN406
C-178647-4
TYPE-B Reverse
CN401
BM20B-SRDS-G-TF
NET,DEBUG
CN405
B12B-PH-K-S
PANEL
IC400
74LCX07MTC
CRU100
SG-8002JC47.234-PCCL
BLM18BD221SN1D
CN403
21FMN-BTK-A
PIF
CN404
175487-4
USB-FS
Q400
A1162
QF400
K2158
DM400
NNCD6.2MF
S[1:0]=[0:1] 90-130MHz
S[1:0]=[1:0] 130-170MHz
S[1:0]=[1:1] 170-200MHz DB
(188.936MHz)

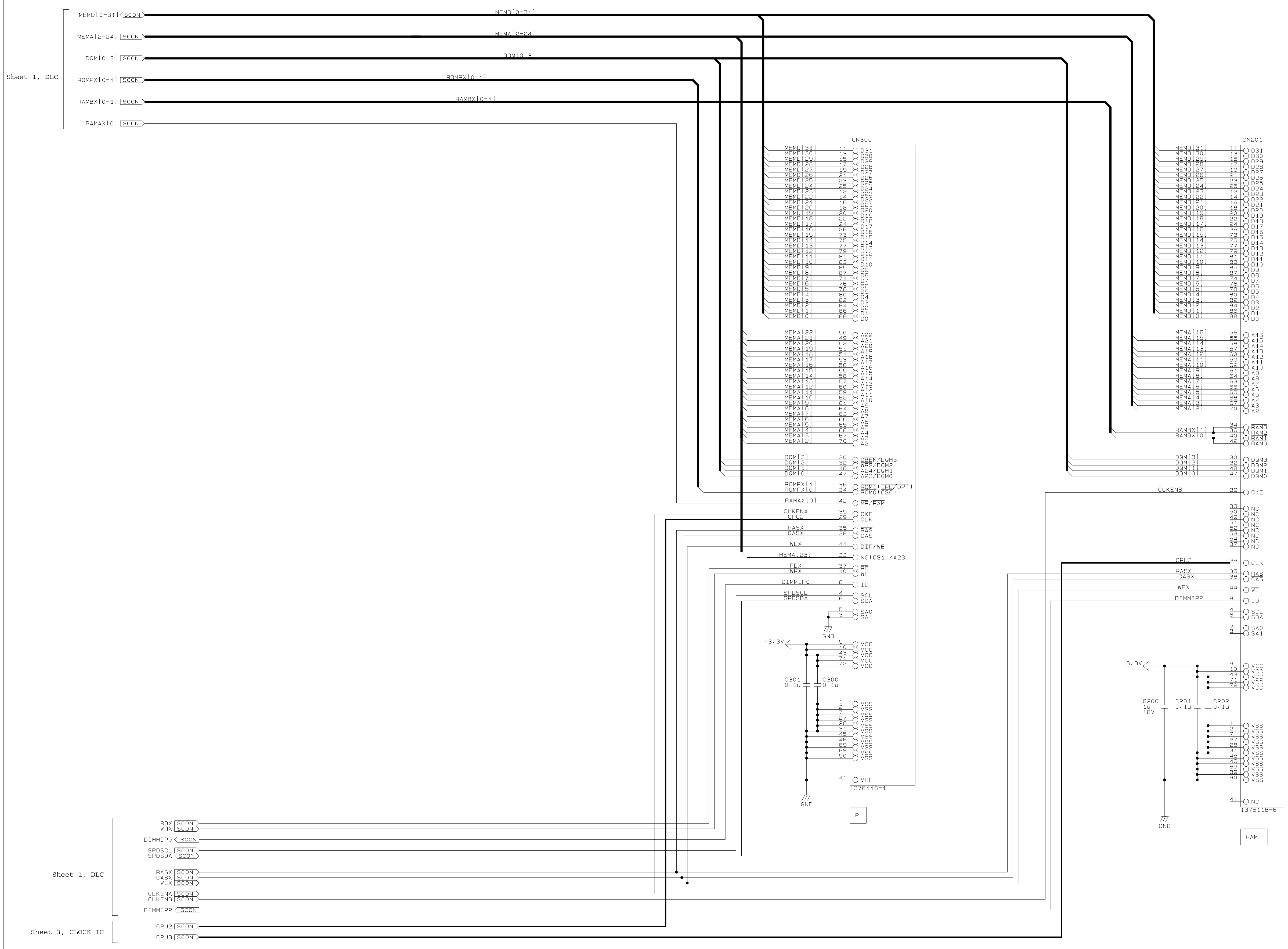
* For wiring, use as thick leads as possible.
Pin connection through C and R to the lines led to the power supply and GND
One point connection to the lines led to the power supply and GND
The entire PLL parts are covered with a GND guard 1 mm or more thick.

* For wiring, use as thick leads as possible.
Pin connection through C and R to the lines led to the power supply and GND
One point connection to the lines led to the power supply and GND
The entire PLL parts are covered with a GND guard 1 mm or more thick.

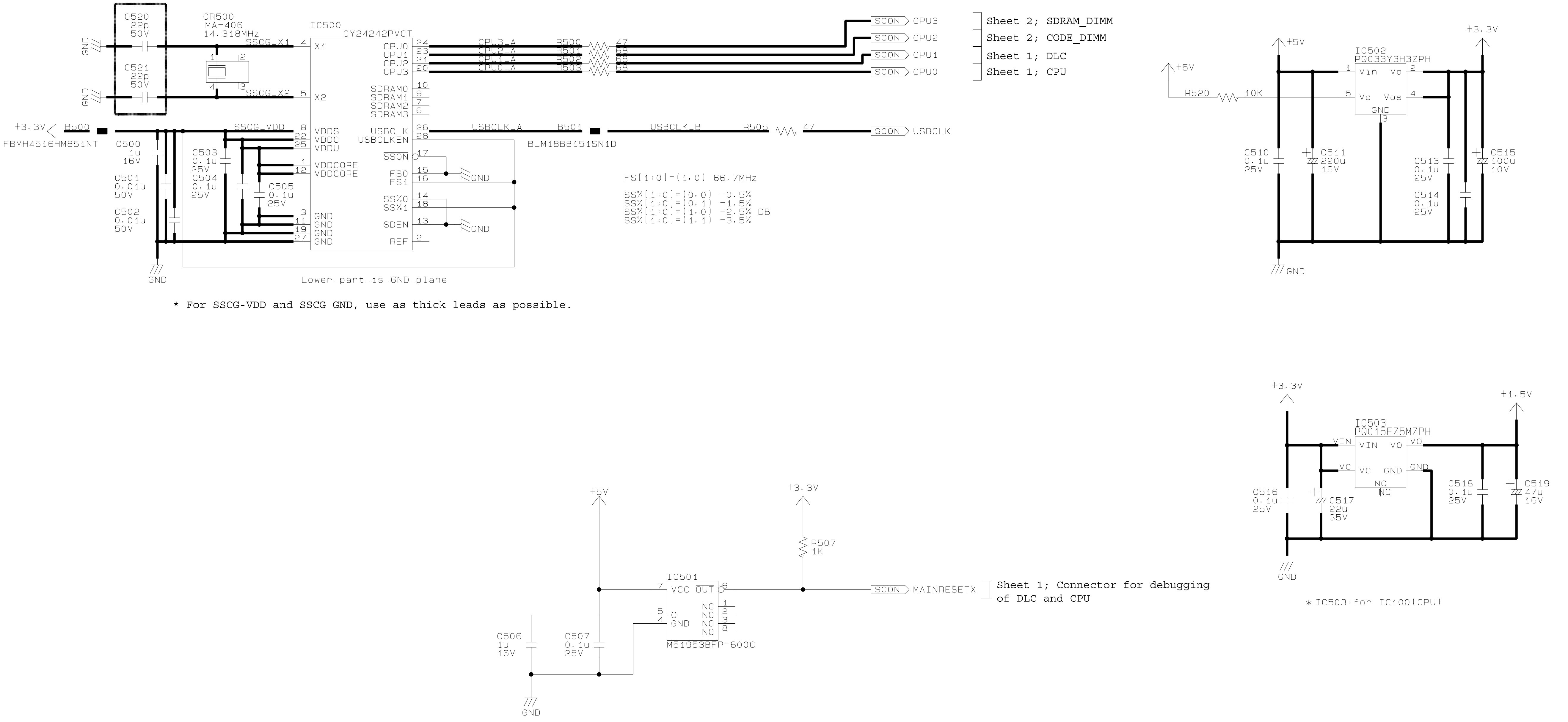
Each pair of D+ and D- lines and of D+_C and D-_C lines are led in parallel with each other in the same length, respectively.

Note 1. Not mounted in ☐.
Note 2. The parts configuration is of EPL-6200.

Model: LP-2500 / EPL-6200
Board: C533MAIN BOARD
Sheet: 1 of 4
Rev. : C


Sheet 1, DLC
MEMD[0-31] SCON
MEMA[2-24] SCON
DQM[0-3] SCON
ROMPX[0-1] SCON
RAMBX[0-1] SCON
RAMAX[0] SCON
MEMD[0-31]
MEMA[2-24]
DQM[0-3]
ROMPX[0-1]
RAMBX[0-1]
CN300
MEMD[31] 11 D31
MEMD[30] 13 D30
MEMD[29] 15 D29
MEMD[28] 17 D28
MEMD[27] 19 D27
MEMD[26] 21 D26
MEMD[25] 23 D25
MEMD[24] 25 D24
MEMD[23] 12 D23
MEMD[22] 14 D22
MEMD[21] 16 D21
MEMD[20] 18 D20
MEMD[19] 20 D19
MEMD[18] 22 D18
MEMD[17] 24 D17
MEMD[16] 26 D16
MEMD[15] 73 D15
MEMD[14] 75 D14
MEMD[13] 77 D13
MEMD[12] 79 D12
MEMD[11] 81 D11
MEMD[10] 83 D10
MEMD[9] 85 D9
MEMD[8] 87 D8
MEMD[7] 74 D7
MEMD[6] 76 D6
MEMD[5] 78 D5
MEMD[4] 80 D4
MEMD[3] 82 D3
MEMD[2] 84 D2
MEMD[1] 86 D1
MEMD[0] 88 D0
MEMA[22] 50 A22
MEMA[21] 49 A21
MEMA[20] 52 A20
MEMA[19] 51 A19
MEMA[18] 54 A18
MEMA[17] 53 A17
MEMA[16] 56 A16
MEMA[15] 55 A15
MEMA[14] 58 A14
MEMA[13] 57 A13
MEMA[12] 60 A12
MEMA[11] 59 A11
MEMA[10] 62 A10
MEMA[9] 61 A9
MEMA[8] 64 A8
MEMA[7] 63 A7
MEMA[6] 66 A6
MEMA[5] 65 A5
MEMA[4] 68 A4
MEMA[3] 67 A3
MEMA[2] 70 A2
DQM[3] 30 DBEN/DQM3
DQM[2] 32 WRS/DQM2
DQM[1] 48 A24/DQM1
DQM[0] 47 A23/DQM0
ROMPX[1] 36 ROM1(IPL/OPT)
ROMPX[0] 34 ROM0(CS0)
RAMAX[0] 42 MR/RAM
CLKENA 39 CKE
CPU2 29 CLK
RASX 35 RAS
CASX 38 CAS
WEX 44 DIR/WE
MEMA[23] 33 NC(CS1)/A23
RDX 37 RD
WRX 40 WR
DIMMIP0 8 ID
SPDSCL 4 SCL
SPDSDA 6 SDA
5 SA0
3 SA1
GND
+3.3V
9 VCC
10 VCC
43 VCC
71 VCC
72 VCC
C301 0.1u
C300 0.1u
1 VSS
2 VSS
7 VSS
27 VSS
28 VSS
31 VSS
45 VSS
46 VSS
69 VSS
89 VSS
90 VSS
41 VPP
1376118-1
GND
P
CN201
MEMD[31] 11 D31
MEMD[30] 13 D30
MEMD[29] 15 D29
MEMD[28] 17 D28
MEMD[27] 19 D27
MEMD[26] 21 D26
MEMD[25] 23 D25
MEMD[24] 25 D24
MEMD[23] 12 D23
MEMD[22] 14 D22
MEMD[21] 16 D21
MEMD[20] 18 D20
MEMD[19] 20 D19
MEMD[18] 22 D18
MEMD[17] 24 D17
MEMD[16] 26 D16
MEMD[15] 73 D15
MEMD[14] 75 D14
MEMD[13] 77 D13
MEMD[12] 79 D12
MEMD[11] 81 D11
MEMD[10] 83 D10
MEMD[9] 85 D9
MEMD[8] 87 D8
MEMD[7] 74 D7
MEMD[6] 76 D6
MEMD[5] 78 D5
MEMD[4] 80 D4
MEMD[3] 82 D3
MEMD[2] 84 D2
MEMD[1] 86 D1
MEMD[0] 88 D0
MEMA[16] 56 A16
MEMA[15] 55 A15
MEMA[14] 58 A14
MEMA[13] 57 A13
MEMA[12] 60 A12
MEMA[11] 59 A11
MEMA[10] 62 A10
MEMA[9] 61 A9
MEMA[8] 64 A8
MEMA[7] 63 A7
MEMA[6] 66 A6
MEMA[5] 65 A5
MEMA[4] 68 A4
MEMA[3] 67 A3
MEMA[2] 70 A2
34 RAM3
RAMBX[1] 36 RAM2
RAMBX[0] 40 RAM1
42 RAM0
DQM[3] 30 DQM3
DQM[2] 32 DQM2
DQM[1] 48 DQM1
DQM[0] 47 DQM0
CLKENB 39 CKE
33 NC
50 NC
49 NC
51 NC
52 NC
53 NC
54 NC
37 NC
CPU3 29 CLK
RASX 35 RAS
CASX 38 CAS
WEX 44 WE
DIMMIP2 8 ID
4 SCL
6 SDA
5 SA0
3 SA1
+3.3V
9 VCC
10 VCC
43 VCC
71 VCC
72 VCC
C200 1u 16V
C201 0.1u
C202 0.1u
1 VSS
2 VSS
7 VSS
27 VSS
28 VSS
31 VSS
45 VSS
46 VSS
69 VSS
89 VSS
90 VSS
41 NC
1376118-6
GND
RAM
Sheet 1, DLC
RDX SCON
WRX SCON
DIMMIP0 SCON
SPDSCL SCON
SPDSDA SCON
RASX SCON
CASX SCON
WEX SCON
CLKENA SCON
CLKENB SCON
DIMMIP2 SCON
Sheet 3, CLOCK IC
CPU2 SCON
CPU3 SCON

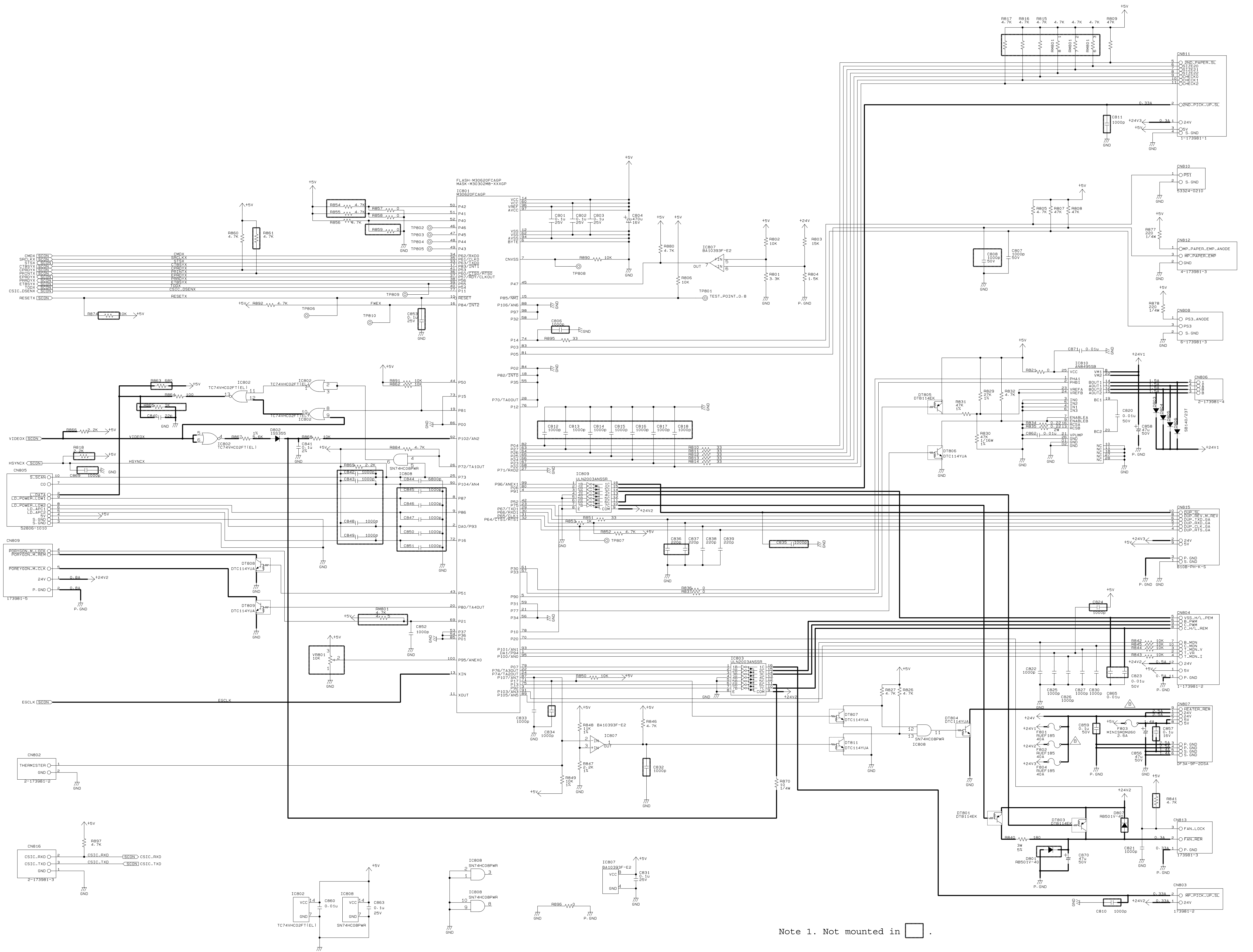
Model: LP-2500 / EPL-6200
Board: C533MAIN BOARD
Sheet: 2 of 4
Rev. : C


C520
22p
50V
C521
22p
50V
GND
GND
CR500
MA-406
14.318MHz
SSCG_X1
SSCG_X2
IC500
CY24242PVCT
X1
X2
CPU0
CPU1
CPU2
CPU3
SDRAM0
SDRAM1
SDRAM2
SDRAM3
VDDS
VDDC
VDDU
VDDCORE
VDDCORE
GND
GND
GND
GND
USBCLK
USBCLKEN
SSON
FS0
FS1
SS%0
SS%1
SDEN
REF
CPU3_A
CPU2_A
CPU1_A
CPU0_A
R500 47
R501 68
R502 68
R503 68
SCON CPU3
SCON CPU2
SCON CPU1
SCON CPU0
Sheet 2; SDRAM_DIMM
Sheet 2; CODE_DIMM
Sheet 1; DLC
Sheet 1; CPU
+3.3V
B500
FBMH4516HM851NT
SSCG_VDD
C500
1u
16V
C501
0.01u
50V
C502
0.01u
50V
C503
0.1u
25V
C504
0.1u
25V
C505
0.1u
25V
GND
USBCLK_A
B501
BLM18BB151SN1D
USBCLK_B
R505 47
SCON USBCLK
Lower_part_is_GND_plane
FS[1:0]=(1.0) 66.7MHz
SS%[1:0]=(0.0) -0.5%
SS%[1:0]=(0.1) -1.5%
SS%[1:0]=(1.0) -2.5% DB
SS%[1:0]=(1.1) -3.5%
+5V
+5V
R520 10K
IC502
PQ033Y3H3ZPH
Vin
Vo
Vc
Vos
GND
+3.3V
C510
0.1u
25V
C511
220u
16V
C513
0.1u
25V
C514
0.1u
25V
C515
100u
10V
GND
+3.3V
+1.5V
IC503
PQ015EZ5MZPH
VIN
VC
VO
GND
NC
C516
0.1u
25V
C517
22u
35V
C518
0.1u
25V
C519
47u
16V
GND
*IC503:for IC100(CPU)
+5V
+3.3V
R507
1K
IC501
M51953BFP-600C
VCC
OUT
C
GND
NC
C506
1u
16V
C507
0.1u
25V
GND
SCON MAINRESETX
Sheet 1; Connector for debugging
of DLC and CPU

* For SSCG-VDD and SSCG GND, use as thick leads as possible.

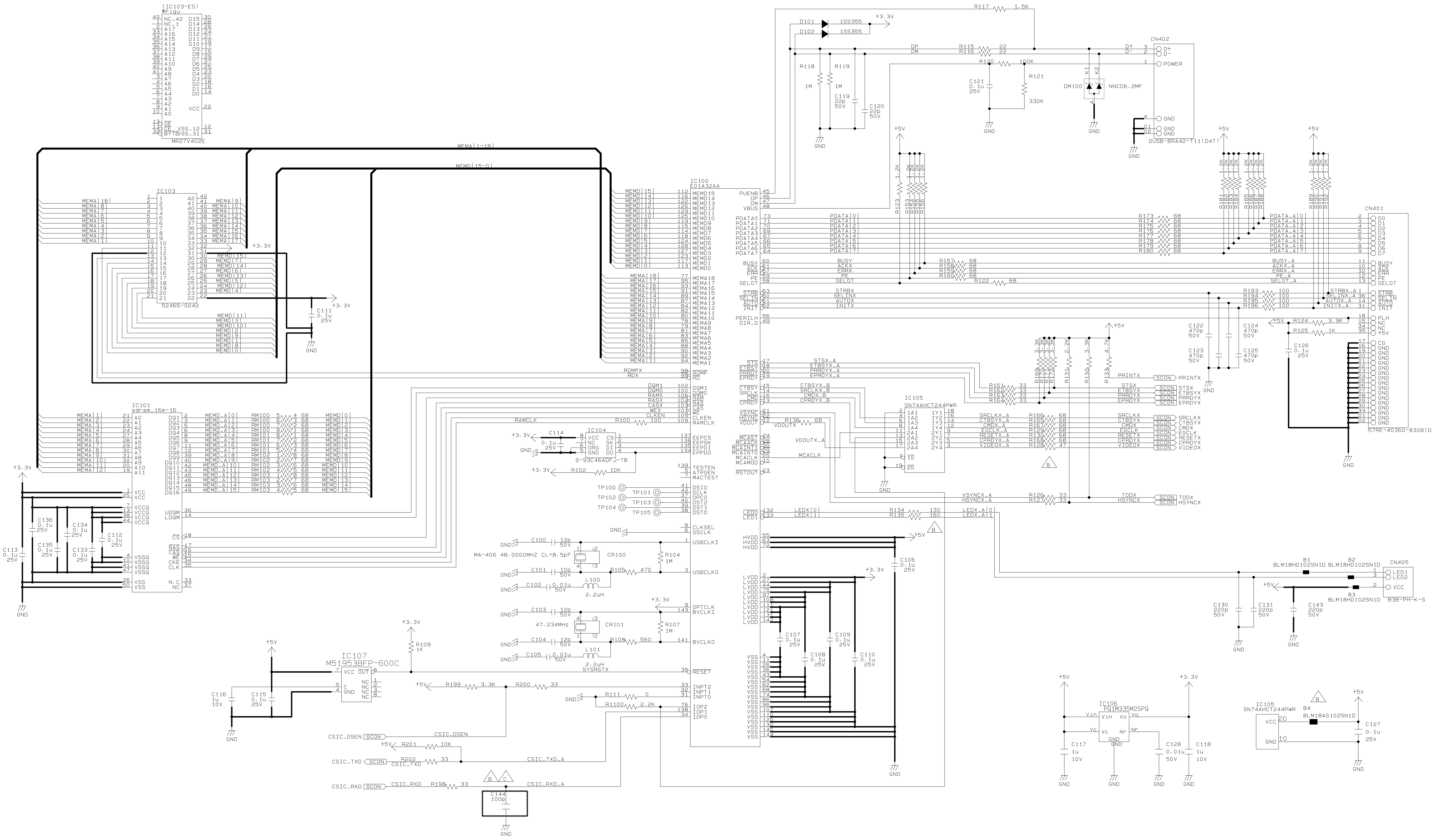
Note 1. Not mounted in ☐.

Model: LP-2500 / EPL-6200
Board: C533MAIN BOARD
Sheet: 3 of 4
Rev. : C


IC801
M30620FCAGP
FLASH:M30620FCAGP
MASK:M30302MB-XXXGP
IC802 TC74VHC02FT(EL)
IC808 SN74HC08PWR
IC807 BA10393F-E2
IC809 ULN2003ANSSR
IC803 ULN2003ANSSR
IC810 AN8495SB
CN811
2ND_PAPER_SL
SIZE0
SIZE1
SIZE2
CHECK0
CHECK1
CHECK2
2ND_PICK_UP_SL
1-173981-1
CN810
PS1
S.GND
53324-0210
CN812
MP_PAPER_EMP_ANODE
MP_PAPER_EMP
GND
4-173981-3
CN808
PS3_ANODE
PS3
S.GND
6-173981-3
CN806
2-173981-4
CN815
DUP_TXD_GA
DUP_RXD_GA
DUP_CLK_GA
DUP_RTS_GA
24V
5V
P.GND
S.GND
CN804
VSS_H/L_PEM
B_PWM
C_PWM
C_H/L_REM
B_MON
C_MON
T_MON_V
T_VR
T_MON_I
24V
5V
P.GND
1-173981-2
CN807
HEATER_REM
24V
5V
P.GND
S.GND
DF3A-5P-2DSA
CN813
FAN_LOCK
FAN_REM
P.GND
173981-3
CN803
MP_PICK_UP_SL
24V
173981-2
CN805
S_SCAN
CO
L_DATA
LD_POWER_LOW1
LD_POWER_LOW2
LD_APC1
LD_APC2
5V
S.GND
52806-1010
CN809
POLYGON_M_LOCK
POLYGON_M_REM
POLYGON_M_CLK
24V
P.GND
173981-5
CN802
THERMISTER
GND
2-173981-2
CN816
CSIC_RXD
CSIC_TXD
GND
2-173981-3
CMDX
SRCLKX
STSX
CTBSYX
CPRDYX
PRINTX
EPRDYX
PRRDYX
ETBSYX
TODX
CSIC_DSENX
RESETX
VIDEOX
HSYNCX
EGCLK
SCON
TEST_POINT_0.8
+5V
+24V
+24V1
+24V2
+24V3
GND
P.GND
S.GND
VR801
F801 RUEF185 40A
F802 RUEF185 40A
F803 MINISMDM260 2.6A
F804 RUEF185 40A
D801 RB501V-40
D802 1SS355
D807 RB501V-40
DT801 DTB114EK
DT803 DTB114EK
DT804 DTC114YUA
DT805 DTB114EK
DT806 DTC114YUA
DT807 DTC114YUA
DT808 DTC114YUA
DT809 DTC114YUA
DT811 DTC114YUA

Note 1. Not mounted in ☐.

Model: LP-2500 / EPL-6200
Board: C533MAIN BOARD
Sheet: 4 of 4
Rev. : C

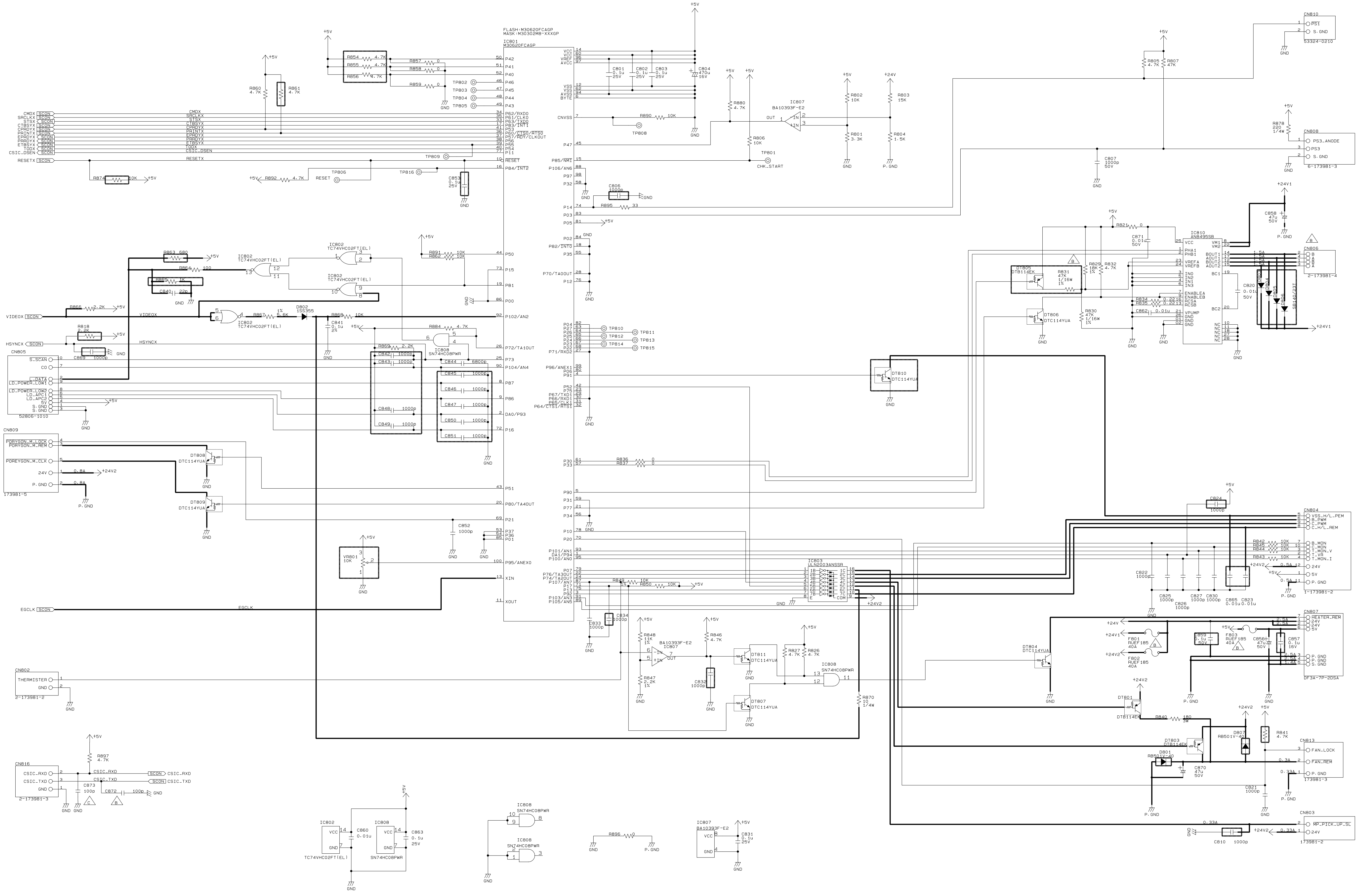

IC103-ES
MR27V402E
IC103
52465-5042
IC100
E01A32AA
IC101
sdram.16m-16
IC104
S-93C46ADFJ-TB
IC105
SN74AHCT244PWR
IC106
PQ1M335M2SPQ
IC107
M51953BFP-600C
CN401
57RE-40360-830B(D7B)
CN402
DUSB-BRA42-T11(D4T)
CN405
B3B-PH-K-S
CR100
MA-406 48.0000MHZ CL=8.5pF
CR101
47.234MHz
DM100
NNCD6.2MF
D101
D102
1SS355
MEMA[1-18]
MEMD[15-0]
B1
B2
B3
B4
BLM18HD102SN1D
BLM18AG102SN1D
+3.3V
+5V
GND
SCON
PRINTX
STSX
ETBSYX
PRRDYX
EPRDYX
SRCLKX
CTBSYX
CMDX
EGCLK
RESETX
CPRDYX
VIDEOX
TODX
HSYNCX
CSIC_DSEN
CSIC_TXD
CSIC_RXD
LED1
LED2
VCC
D+
D-
POWER

Note 1. Not mounted in ☐.

Provide the following silk-screen
printing in the vicinity of JP100.

OPEN :NIBBLE
SHORT:ECP

Model: LP-1400 / EPL-6200L
Board: C534MAIN BOARD
Sheet: 1 of 2
Rev. : C


IC801
FLASH-M30620FCAGP
MASK-M30302M8-XXXGP
M30620FCAGP
IC802 TC74VHC02FT(EL)
IC808 SN74HC08PWR
IC807 BA10393F-E2
IC803 ULN2003ANSSR
IC810 AN8495SB
CN802 THERMISTER GND 2-173981-2
CN805 52806-1010
CN809 173981-5
CN816 2-173981-3
CN810 PS1 S.GND 53324-0210
CN808 PS3_ANODE PS3 S.GND 6-173981-3
CN806 2-173981-4
CN804 1-173981-2
CN807 DF3A-7P-2DSA
CN813 FAN_LOCK FAN_REM P.GND 173981-3
CN803 MP_PICK_UP_SL 24V 173981-2
VR801 10K
CMDX SRCLKX STSX CTBSYX CPRDYX PRINTX EPRDYX PPRDYX ETBSYX TODX CSIC_DSEN RESETX
VIDEOX HSYNCX ESCLK
+5V +24V GND P.GND
TP801 CHK_START
TP806 RESET
F801 RUEF185 40A
F802 RUEF185 40A
F803 RUEF185 40A

Note 1. Not mounted in ☐.

Model: LP-1400 / EPL-6200L
Board: C534MAIN BOARD
Sheet: 2 of 2
Rev. : C

7.3 Exploded Diagrams

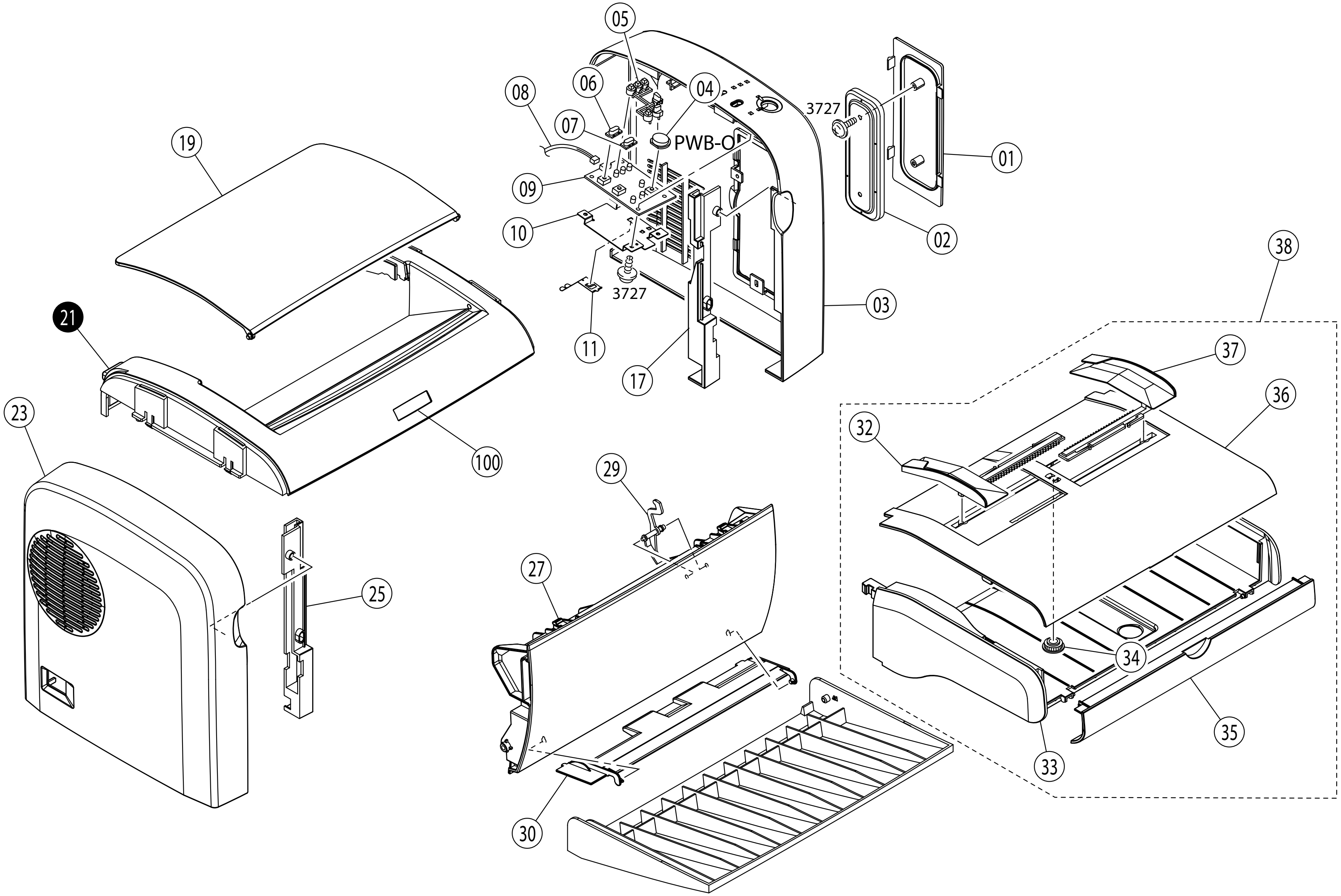
This section shows exploded diagrams of EPL-6200/EPL-6200L.

☐ EPL-6200
  - Housing *(p.187)*
  - Engine Components - Fusing/Paper Exit mechanism *(p.188)*
  - Engine Components - Paper Feeding mechanism *(p.189)*
  - Engine Components - Drive mechanism *(p.190)*
  - Electrical Components *(p.191)*

☐ EPL-6200L
  - Housing *(p.192)*
  - Engine Components - Fusing/Paper Exit mechanism *(p.193)*
  - Engine Components - Paper Feeding mechanism *(p.194)*
  - Engine Components - Drive mechanism *(p.195)*
  - Electrical Components *(p.196)*

C533-CASE-001

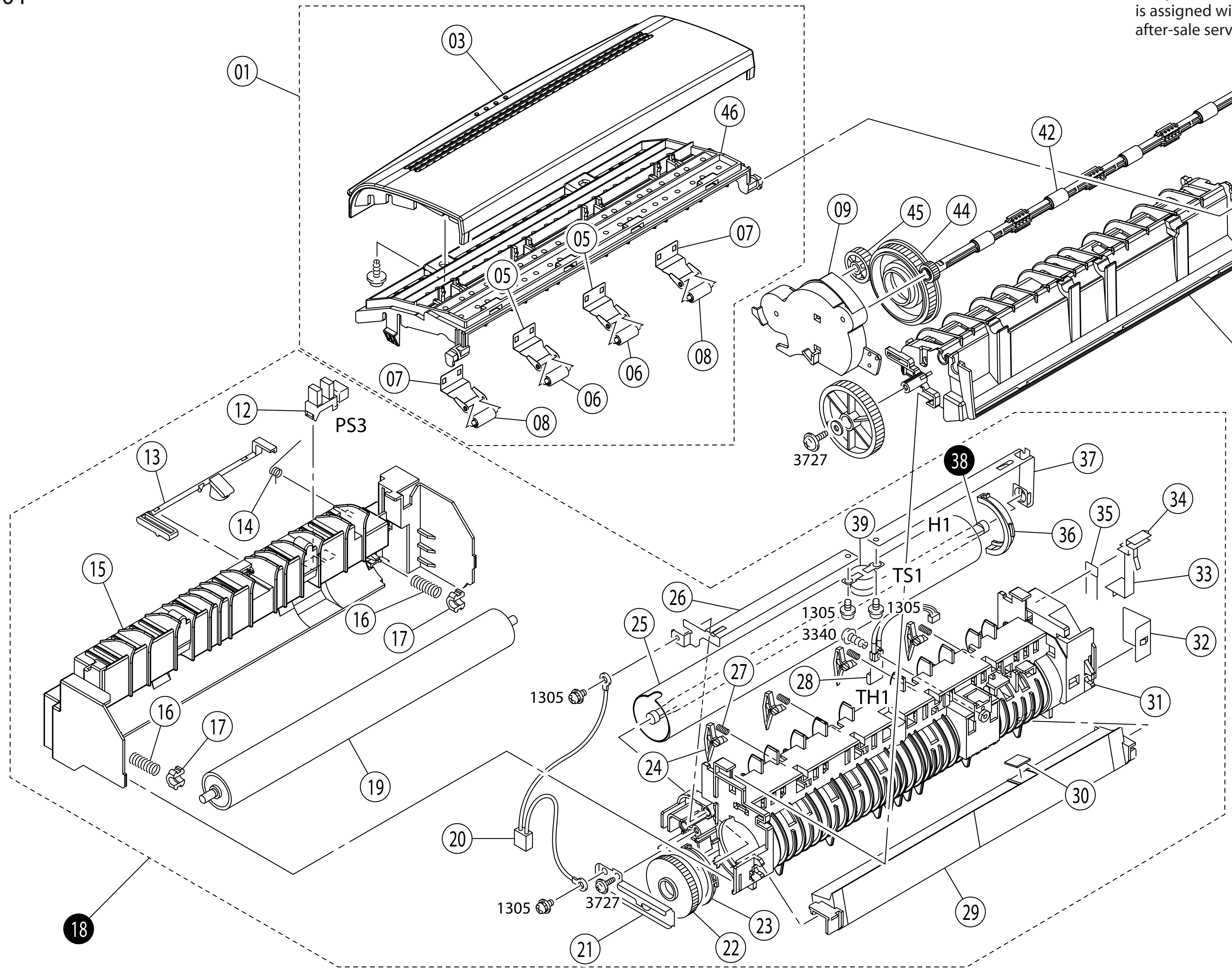
The parts to which no reference number
is assigned will not be available as
after-sale service parts.


05
06
08
04
07
3727
PWB-O
01
19
09
02
10
38
3727
03
21
11
37
17
23
36
32
100
29
27
25
34
35
33
30

FOR LP-2500/EPL-6200 NO.01 Rev.01 C533

C533-MECH-001

The parts to which no reference number is assigned will not be available as after-sale service parts.

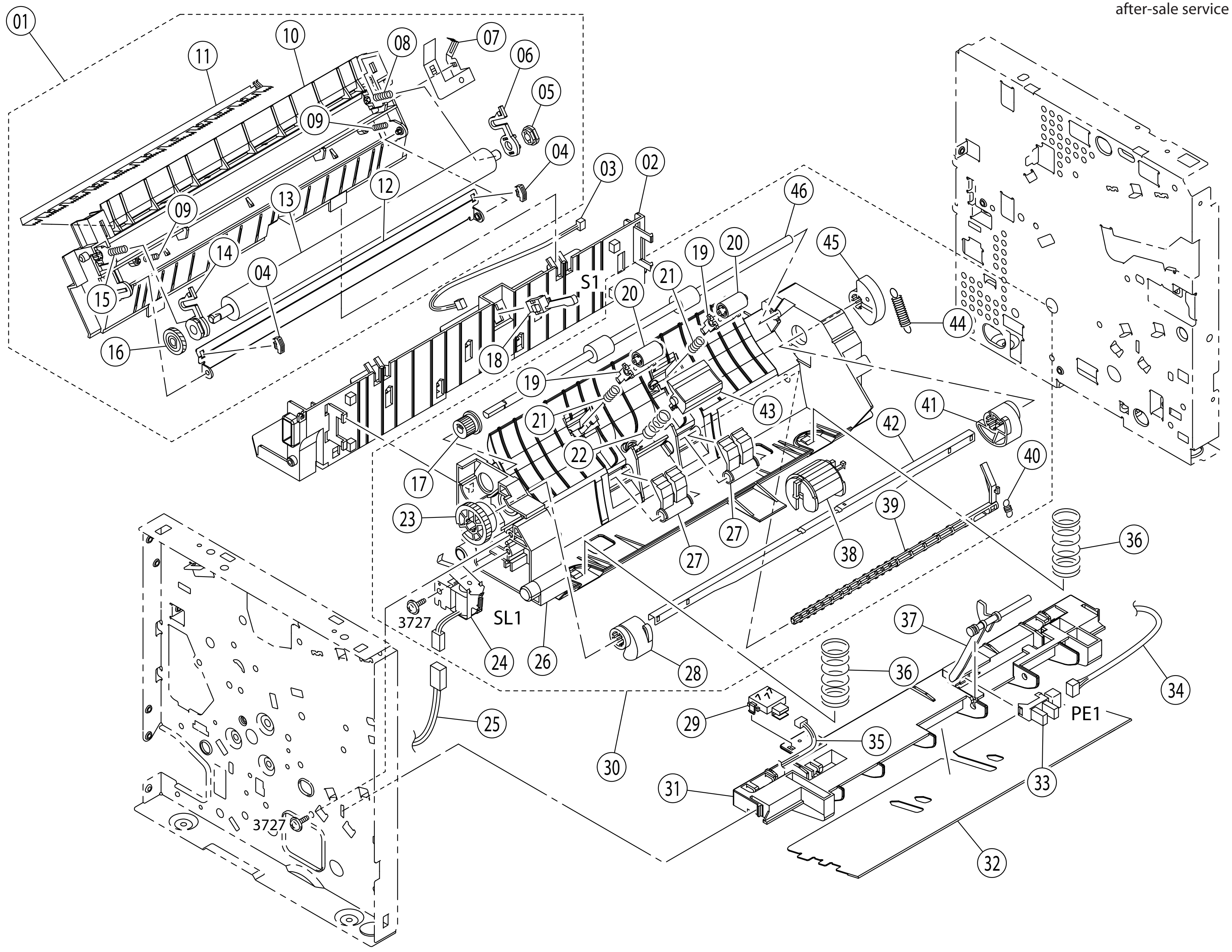


01
03
46
42
05
05
07
09
45
44
05
07
08
06
06
07
08
06
40
12
PS3
3727
13
38
37
14
34
39
H1
35
36
15
TS1
33
26
1305
1305
16
25
3340
32
17
27
28
31
1305
TH1
16
17
24
30
19
20
29
1305
3727
23
18
21
22

FOR LP-2500/EPL-6200 NO.02 Rev.01 C533

C533-MECH-002

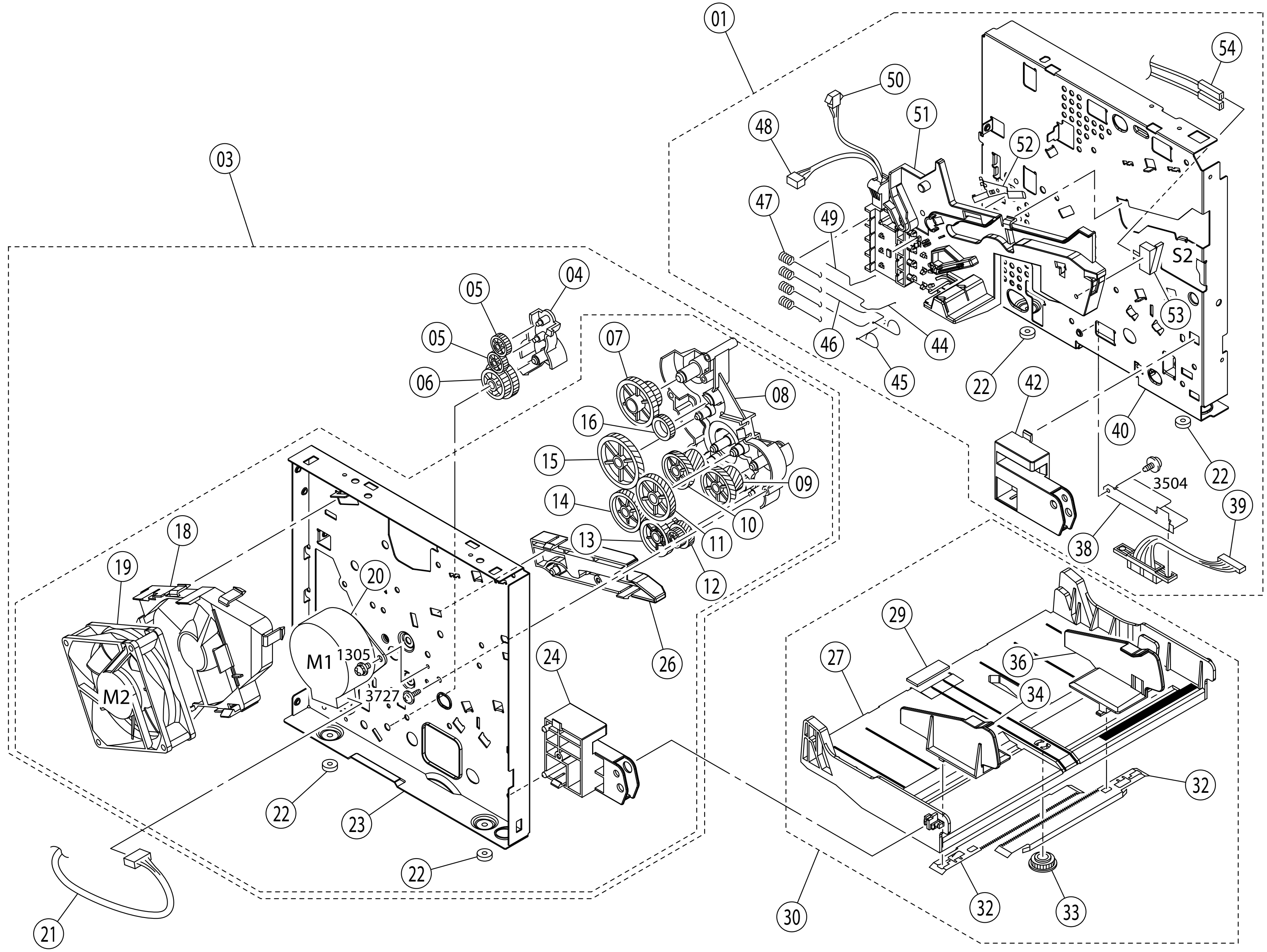
The parts to which no reference number is assigned will not be available as after-sale service parts.


01
11
10
08
07
06
05
09
04
03
02
12
13
09
46
19
20
45
14
04
S1
21
20
44
15
16
18
19
43
21
41
42
22
40
17
23
27
27
38
39
36
37
3727
SL1
24
26
28
36
34
25
29
35
PE1
33
30
31
32
3727

FOR LP-2500/EPL-6200 NO.03 Rev.01 C533

C533-MECH-003

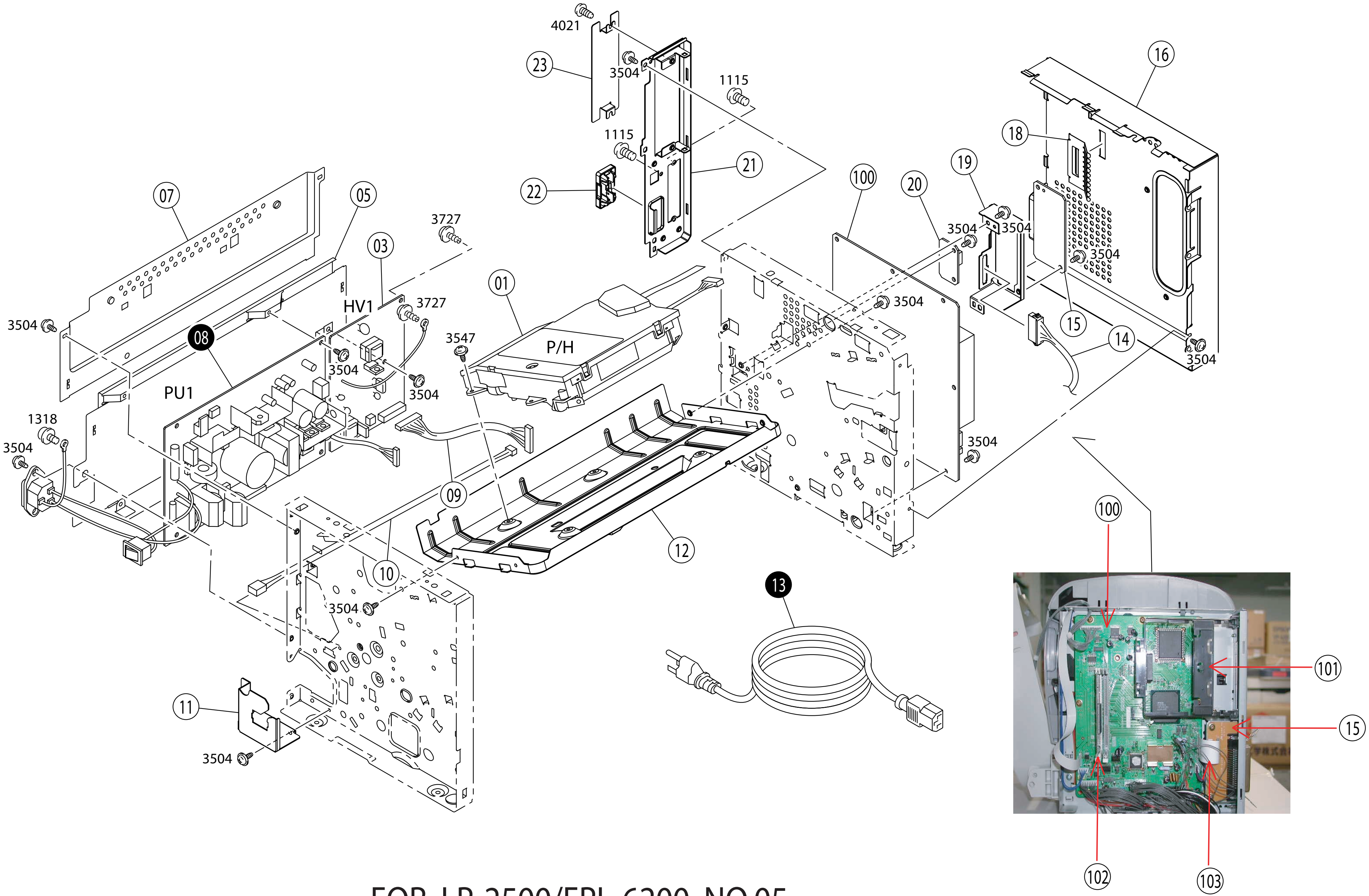
The parts to which no reference number is assigned will not be available as after-sale service parts.


01
54
50
48
51
52
47
49
S2
53
46
44
45
22
42
40
22
3504
39
38
03
04
05
05
06
07
08
16
15
09
14
10
13
11
12
18
19
20
26
M1
1305
3727
M2
24
29
27
36
34
32
22
23
22
21
30
32
33

FOR LP-2500/EPL-6200 NO.04 Rev.01 C533

C533-ELEC-001

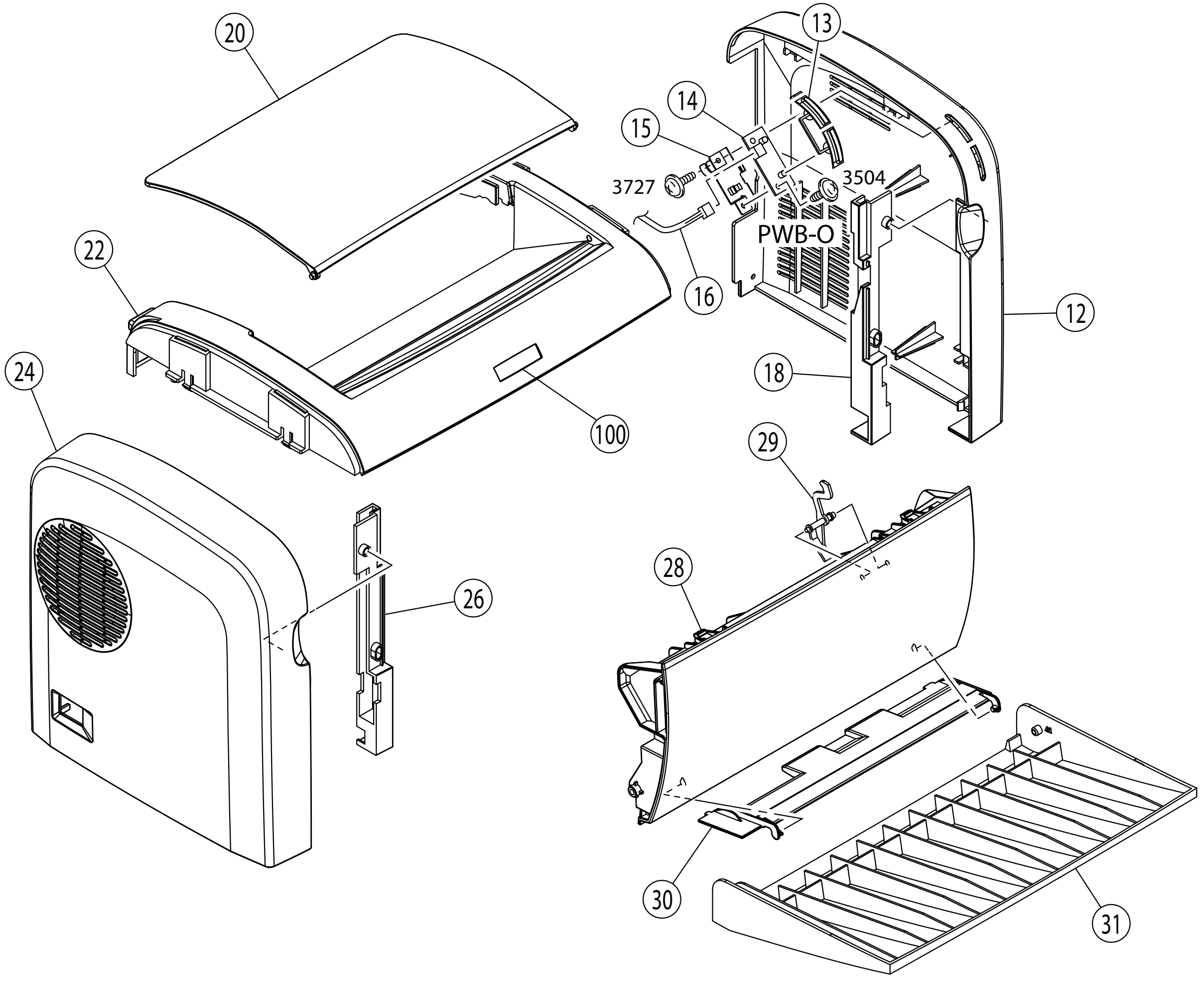
The parts to which no reference number is assigned will not be available as after-sale service parts.


4021
23
3504
1115
1115
21
22
16
18
19
100
20
3504
3504
3504
3504
07
05
03
3727
3727
01
HV1
P/H
3547
3504
08
3504
PU1
3504
1318
3504
3504
15
14
3504
3504
09
12
10
3504
13
11
3504
100
101
15
102
103

FOR LP-2500/EPL-6200 NO.05 Rev.01 C533

C534-CASE-001

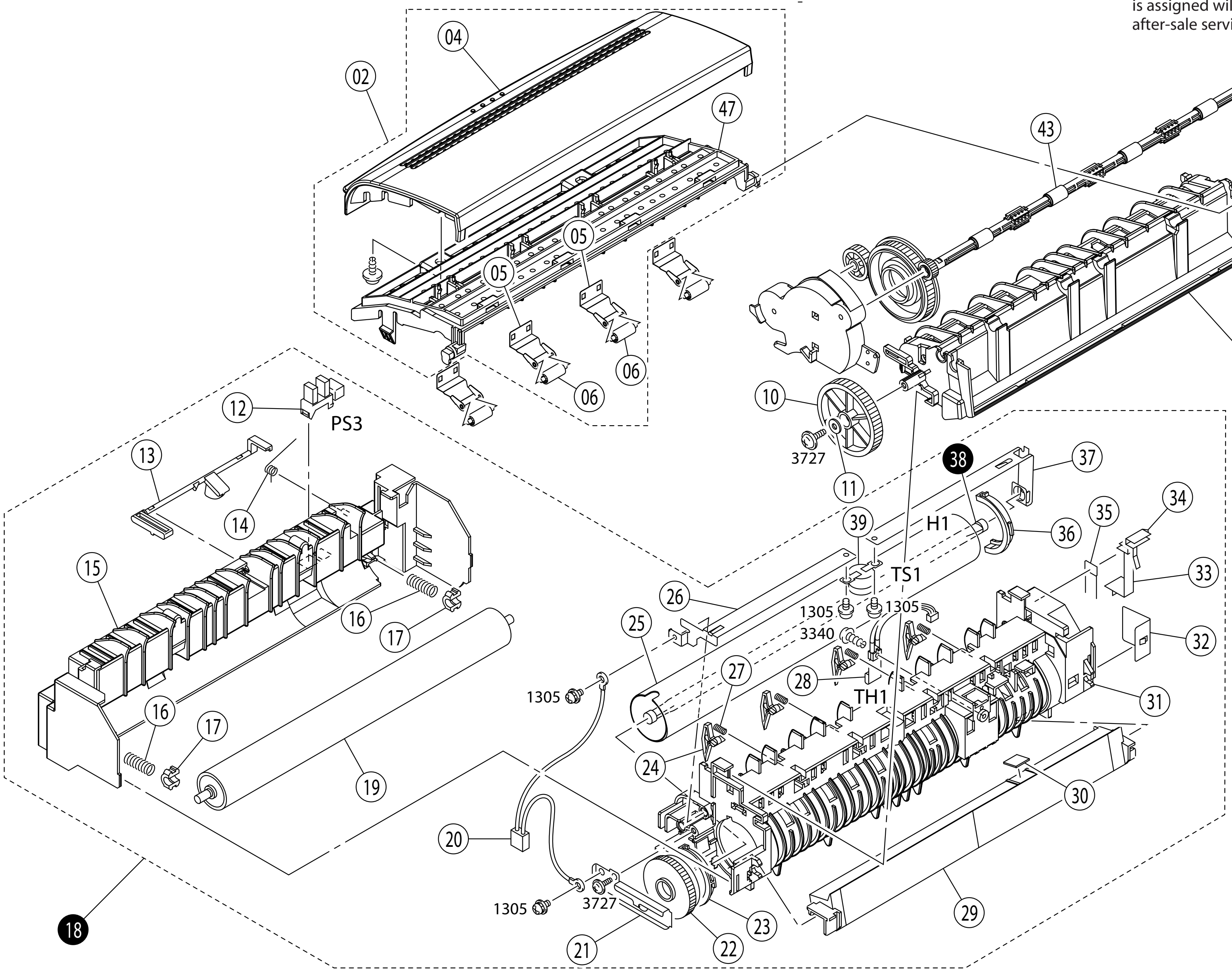
The parts to which no reference number is assigned will not be available as after-sale service parts.


20
13
14
15
3727
3504
PWB-O
22
16
12
24
18
100
29
28
26
30
31

FOR LP-1400/EPL-6200L NO.01 Rev.01 C534

C534-MECH-001

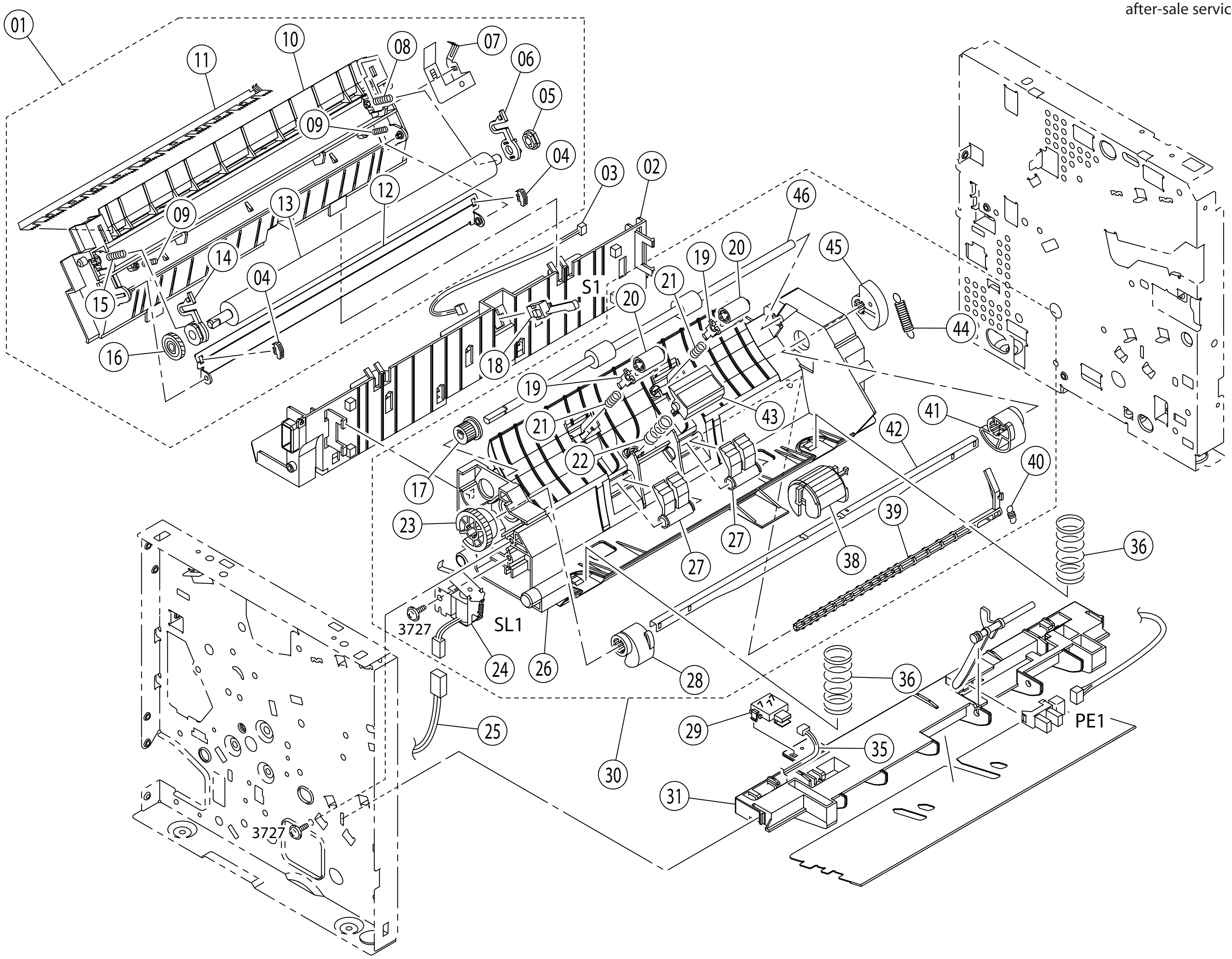
The parts to which no reference number
is assigned will not be available as
after-sale service parts.


04
02
47
43
05
05
41
06
06
12
PS3
10
3727
13
14
11
38
37
H1
39
36
35
34
15
TS1
33
16
17
26
1305
1305
25
3340
32
27
28
TH1
31
1305
16
17
24
30
19
20
1305
3727
23
29
21
22
18

FOR LP-1400/EPL-6200L NO.02 Rev.01 C502

C534-MECH-002

The parts to which no reference number
is assigned will not be available as
after-sale service parts.


01
11
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08
07
06
05
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04
03
02
46
12
13
09
14
15
15
04
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S1
19
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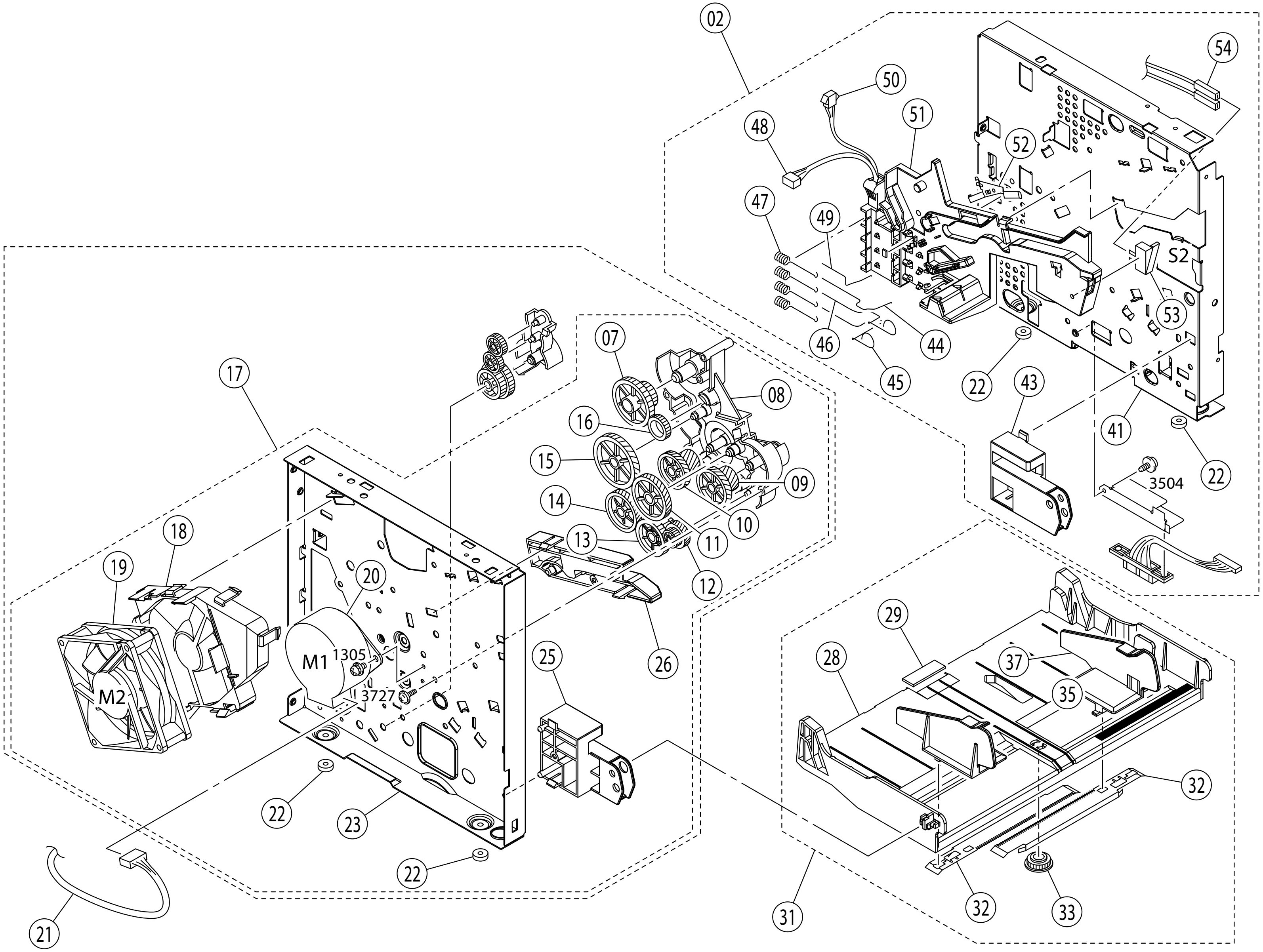
45
20
44
18
19
43
21
41
42
22
40
17
23
39
36
27
27
38
3727
SL1
24
26
28
36
25
29
35
PE1
30
31
3727

FOR LP-1400/EPL-6200L NO.03 Rev.01 C534

C534-MECH-003

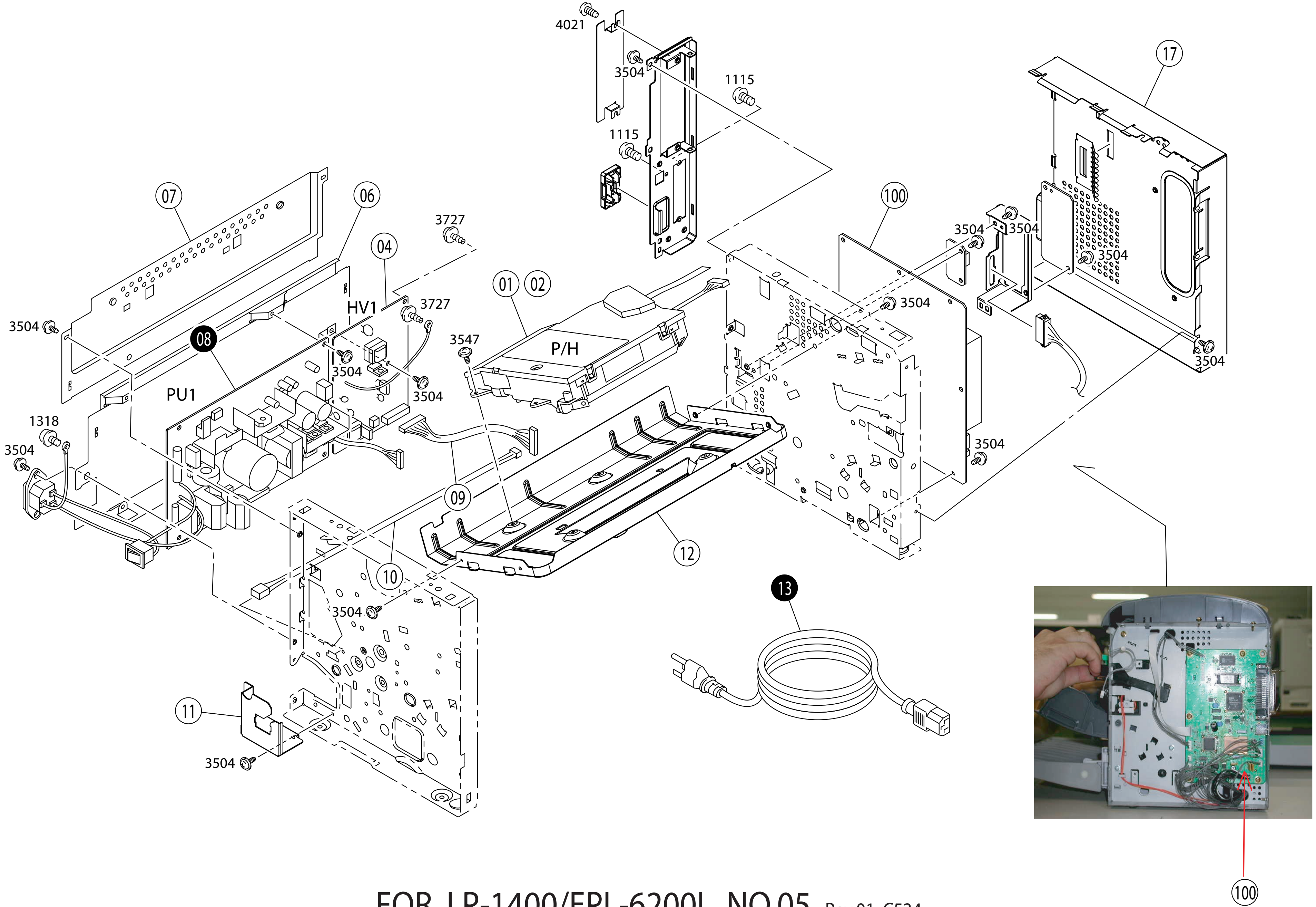
The parts to which no reference number
is assigned will not be available as
after-sale service parts.


02
54
50
51
48
52
47
49
S2
53
46
44
45
22
43
41
3504
22
07
08
16
15
09
14
10
13
11
12
17
18
19
20
M1
1305
3727
M2
26
25
22
23
22
21
29
28
37
35
32
31
32
33

FOR LP-1400/EPL-6200L NO.04 Rev.01 C534

C534-ELEC-001

The parts to which no reference number is assigned will not be available as after-sale service parts.


4021
3504
1115
1115
17
07
06
100
3727
04
3504
3504
3504
HV1
3727
01
02
3504
3504
3504
08
3547
P/H
3504
PU1
3504
3504
1318
3504
3504
09
12
10
13
3504
11
3504
100

FOR LP-1400/EPL-6200L NO.05 Rev.01 C534

7.4 ASP List

The ASP list of EPL-6200/EPL-6200L are shown on the following page.

☐ ASP List for EPL-6200 *(p.198)*

☐ ASP List for EPL-6200L *(p.202)*

EPL-6200

Table 7-4. ASP List - EPL-6200

Ref. No.	Description
01-01	COVER
01-02	SHIELD
01-03	COVER
01-04	BUTTON
01-05	LENS
01-06	BUTTON
01-07	BUTTON
01-08	HARNESS
01-09	PWB ASSY
01-10	BRACKET
01-100	"LOGO PLATE 10X40;C,2COLOR SEIKEI"
01-11	EARTH GROUND
01-17	COVER
01-19	TRAY
01-21	TOP COVER
01-23	COVER
01-25	COVER
01-27	COVER
01-29	LEVER
01-30	COVER
01-32	REGULATIN PLATE
01-33	TRAY
01-34	GEAR
01-35	COVER
01-36	COVER
01-37	REGULATING PLATE
01-38	TRAY ASSY
3727	TAPPING SCREW
05-01	PRINT HEAD ASSY
05-03	HV TRANSFORMER
05-05	FRAME
05-07	FRAME
05-08	POWER SUPPLY 200V
05-09	WIRE HARNESS ASSY
05-10	WIRE HARNESS ASSY
05-100	"BOARD ASSY., MAIN"
05-101	GUIDE RAIL TYPE-B
05-102	"BOARD ASSY.,MEMORY"
05-103	WIRE HARNESS ASSY
05-11	BRACKET
05-12	BASE FRAME
05-13	"AC CABLE,AS31303SI-A"
05-13	POWER CABLE
05-14	WIRE HARNESS ASSY
05-15	PWB ASSY I/F
05-16	SHIELD
05-18	EARTH GROUND
05-19	BRACKET
05-20	"BOARD ASSY.,PERIPHERAL"
05-21	BRACKET
05-22	COVER
05-23	"COVER,TYPE-B"
1115	SCREW
1318	SCREW
3547	SCREW
4021	TAPPING SCREW
02-01	TOP COVER ASSY
02-03	COVER
02-05	SPRING

Table 7-4. ASP List - EPL-6200

Ref. No.	Description
02-06	ROLL
02-07	SPRING
02-08	ROLL
02-09	HOLDER
02-12	SOLID STATE SWITCH
02-13	ACTUATOR
02-14	TORSION SPRING
02-15	HOUSING
02-16	PRESSURE SPRING
02-17	BUSHING
02-18	FUSING UNIT 230V
02-19	ROLLER
02-20	WIRE HARNESS ASSY
02-21	TERMINAL
02-22	GEAR
02-23	BUSHING
02-24	SEPARATOR
02-25	ROLLER
02-26	TERMINAL
02-27	PRESSURE SPRING
02-28	THERMISTOR
02-29	GUIDE
02-30	BRUSH
02-31	HOUSING
02-32	SPRING
02-33	CONTACT
02-34	CONTACT
02-35	RESISTOR
02-36	BUSHING
02-37	TERMINAL

Table 7-4. ASP List - EPL-6200

Ref. No.	Description
02-38	HEATER 220V
02-39	THERMAL SWITCH
02-40	GUIDE
02-42	ROLLER
02-44	GEAR
02-45	GEAR
02-46	GUIDE
03-01	TRANSFER UNIT
03-02	GUIDE
03-03	WIRE HARNESS ASSY
03-04	SPACER
03-05	CONDUCTIVE MEMBER
03-06	BUSHING
03-07	CONTACT
03-08	PRESSURE SPRING
03-09	PRESSURE SPRING
03-10	HOLDER
03-11	NEUTRALIZING NEEDLE
03-12	GUIDE PLATE
03-13	TRANSFER ROLLER
03-14	BUSHING
03-15	PRESSURE SPRING
03-16	GEAR
03-17	GEAR
03-18	MICRO-SWITCH
03-19	HOLDER
03-20	ROLL
03-21	PRESSURE SPRING
03-22	PRESSURE SPRING
03-23	GEAR

Table 7-4. ASP List - EPL-6200

Ref. No.	Description
03-24	SOLENOID
03-25	WIRE HARNESS ASSY
03-26	GUIDE
03-27	STOPPER
03-28	CAM
03-29	CONNECTOR PIN
03-30	PAPER TAKE-UP UNIT
03-31	HOLDER
03-32	TRAY
03-33	SOLID STATE SWITCH
03-34	WIRE HARNESS ASSY
03-35	WIRE HARNESS ASSY
03-36	PRESSURE SPRING
03-37	ACTUATOR
03-38	ROLLER
03-39	LEVER
03-40	TENSION SPRING
03-41	CAM
03-42	SHAFT
03-43	FRICTION SHEET ASSY
03-44	TENSION SPRING
03-45	CAM
03-46	ROLLER
04-01	RIGHT FRAME ASSY
04-03	LEFT FRAME ASSY
04-04	HOLDER
04-05	GEAR
04-06	GEAR
04-07	GEAR
04-08	HOLDER

Table 7-4. ASP List - EPL-6200

Ref. No.	Description
04-09	GEAR
04-10	GEAR
04-11	GEAR
04-12	GEAR
04-13	GEAR
04-14	GEAR
04-15	GEAR
04-16	GEAR
04-18	DUCT
04-19	FAN MOTER
04-20	MOTER
04-21	WIRE HARNESS ASSY
04-22	RUBBER FOOT
04-23	FRAME
04-24	HOLDER
04-26	GUIDE
04-27	LIFTING PLATE
04-29	FRICTION SHEET
04-30	REGULATING PLATE ASSY
04-32	RACK
04-33	GEAR
04-34	REGULATING PLATE
04-36	REGULATING PLATE
04-38	BRACKET
04-39	WIRE HARNESS ASSY
04-40	FRAME
04-42	HOLDER
04-44	CONTACT
04-45	CONTACT
04-46	CONTACT

Table 7-4. ASP List - EPL-6200

Ref.No.	Description
04-47	CONTACT
04-48	WIRE HARNESS ASSY
04-49	CONTACT
04-50	WIRE HARNESS ASSY
04-51	GUIDE
04-52	EARTH GROUND
04-53	MICRO-SWITCH
04-54	WIRE HARNESS ASSY
1305	SCREW
3340	TAPPING SCREW
3504	SCREW

EPL-6200L

Table 7-5. ASP List - EPL-6200L

Ref.No.	Description
01-100	"LOGO PLATE 10X40;C,2COLOR SEIKEI"
01-12	COVER
01-13	LENS
01-14	PWB ASSY
01-15	BRACKET
01-16	HARNESS
01-18	COVER
01-20	TRAY
01-22	TOP COVER
01-24	COVER
01-26	COVER
01-28	COVER
01-29	LEVER
01-30	COVER
01-31	TRAY
3504	SCREW
3727	TAPPING SCREW
05-02	PRINT HEAD ASSY
05-04	HV TRANSFORMER
05-06	FRAME
05-07	FRAME
05-08	POWER SUPPLY 200V
05-09	WIRE HARNESS ASSY
05-10	WIRE HARNESS ASSY
05-100	"BOARD ASSY., MAIN"
05-11	BRACKET
05-12	BASE FRAME
05-13	"AC CABLE,AS31303SI-A"
05-13	POWER CABLE
05-17	SHIELD
1115	SCREW
1318	SCREW
3547	SCREW
4021	TAPPING SCREW
02-02	TOP COVER ASSY
02-04	COVER
02-05	COVER
02-06	ROLL
02-10	GEAR
02-11	WASHER
02-12	SOLID STATE SWITCH
02-13	ACTUATOR
02-14	TORSION SPRING
02-15	HOUSING
02-16	PRESSURE SPRING
02-17	BUSHING
02-18	FUSING UNIT 230V
02-19	ROLLER
02-20	WIRE HARNESS ASSY
02-21	TERMINAL
02-22	GEAR
02-23	BUSHING
02-24	SEPARATOR
02-25	ROLLER
02-26	TERMINAL
02-27	PRESSURE SPRING
02-28	THERMISTOR
02-29	GUIDE
02-30	BRUSH

Table 7-5. ASP List - EPL-6200L

Ref.No.	Description
02-31	HOUSING
02-32	SPRING
02-33	CONTACT
02-34	CONTACT
02-35	RESISTOR
02-36	BUSHING
02-37	TERMINAL
02-38	HEATER 220V
02-39	THERMAL SWITCH
02-41	GUIDE
02-43	ROLLER
02-47	GUIDE
03-01	TRANSFER UNIT
03-02	GUIDE
03-03	WIRE HARNESS ASSY
03-04	SPACER
03-05	CONDUCTIVE MEMBER
03-06	BUSHING
03-07	CONTACT
03-08	PRESSURE SPRING
03-09	PRESSURE SPRING
03-10	HOLDER
03-11	NEUTRALIZING NEEDLE
03-12	GUIDE PLATE
03-13	TRANSFER ROLLER
03-14	BUSHING
03-15	PRESSURE SPRING
03-16	GEAR
03-17	GEAR
03-18	MICRO-SWITCH
03-19	HOLDER
03-20	ROLL
03-21	PRESSURE SPRING
03-22	PRESSURE SPRING
03-23	GEAR
03-24	SOLENOID
03-25	WIRE HARNESS ASSY
03-26	GUIDE
03-27	STOPPER
03-28	CAM
03-29	CONNECTOR PIN
03-30	PAPER TAKE-UP UNIT
03-31	HOLDER
03-35	WIRE HARNESS ASSY
03-36	PRESSURE SPRING
03-38	ROLLER
03-39	LEVER
03-40	TENSION SPRING
03-41	CAM
03-42	SHAFT
03-43	FRICTION SHEET ASSY
03-44	TENSION SPRING
03-45	CAM
03-46	ROLLER
04-02	RIGHT FRAME ASSY
04-07	GEAR
04-08	HOLDER
04-09	GEAR
04-10	GEAR
04-11	GEAR

Table 7-5. ASP List - EPL-6200L

Ref.No.	Description
04-12	GEAR
04-13	GEAR
04-14	GEAR
04-15	GEAR
04-16	GEAR
04-17	LEFT FRAME ASSY
04-18	DUCT
04-19	FAN MOTER
04-20	MOTER
04-21	WIRE HARNESS ASSY
04-22	RUBBER FOOT
04-23	FRAME
04-25	HOLDER
04-26	GUIDE
04-28	LIFTING PLATE
04-29	FRICTION SHEET
04-31	REGULATING PLATE ASSY
04-32	RACK
04-33	GEAR
04-35	REGULATING PLATE
04-37	REGULATING PLATE
04-41	FRAME
04-43	HOLDER
04-44	CONTACT
04-45	CONTACT
04-46	CONTACT
04-47	CONTACT
04-48	WIRE HARNESS ASSY
04-49	CONTACT
04-50	WIRE HARNESS ASSY
04-51	GUIDE
04-52	EARTH GROUND
04-53	MICRO-SWITCH
04-54	WIRE HARNESS ASSY
1305	SCREW
3340	TAPPING SCREW